

HOW TO DRAW  
**MANGA**  
**Sketching Manga-Style**

*Vol.5 Sketching Props*

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# The Elliptical World of *Manga*



Circles constitute  
the base forms of  
sleeves and hats.

Even corners  
are rounded.

Cups and bottles

# The Secret to Drawing Appealing Composition Lies in Circles (Curves)

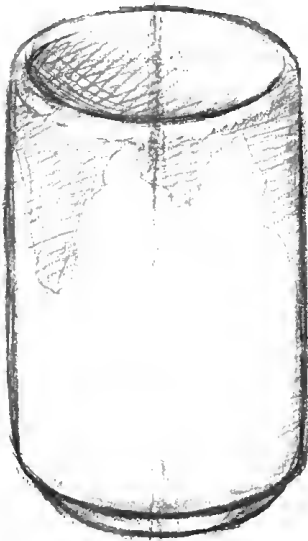
*Manga* in addition to book and magazine illustrations are full of circles. The spaces people inhabit in their daily existences come abounding with round objects and rounded corners.





# If You Can Draw a Mug, You Can Draw Anything!

Round objects visually become ellipses. This is best represented by the all-familiar drinking mug. A handle-less mug constitutes the base form of all "elliptical objects" and curves. This includes the portrayal of spaces, solid objects created using ellipses, and of thicknesses and volumes formed using combinations of ellipses.



"Yunomi"  
(\*A handle-less mug used to drink hot tea)

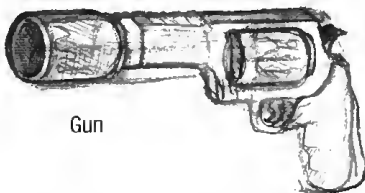


Various pots

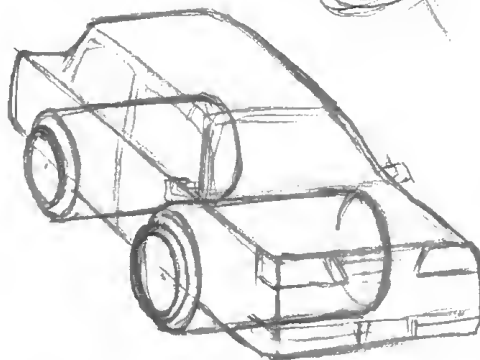


Unomi

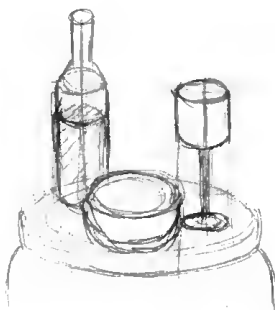
(\*A pun on "yunomi," or a handle-less mug, which is the cup pictured, and "unomi" which refers to fishing with a cormorant)



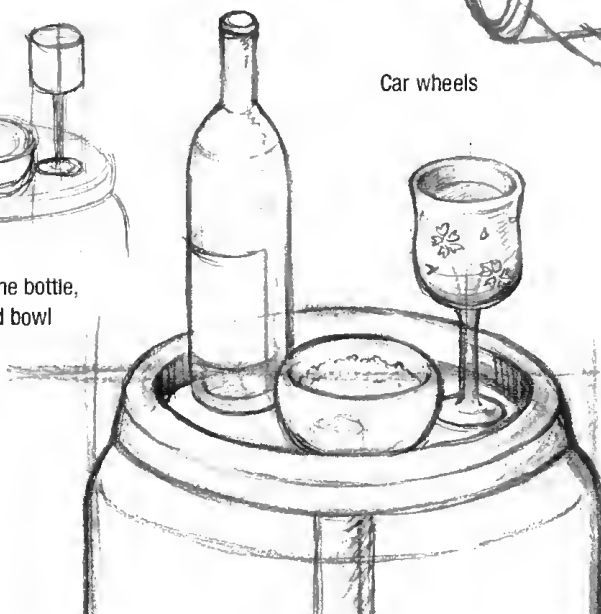
Gun



Car wheels



Tray with a wine bottle,  
wineglass, and bowl

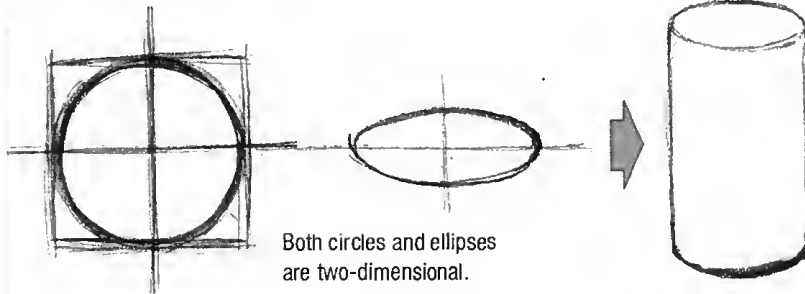


Clothing accessories



# From Fashion to Personal Effects and Weapons—Character Props

## Chapter 1: From Two to Three Dimensions



Both circles and ellipses are two-dimensional.

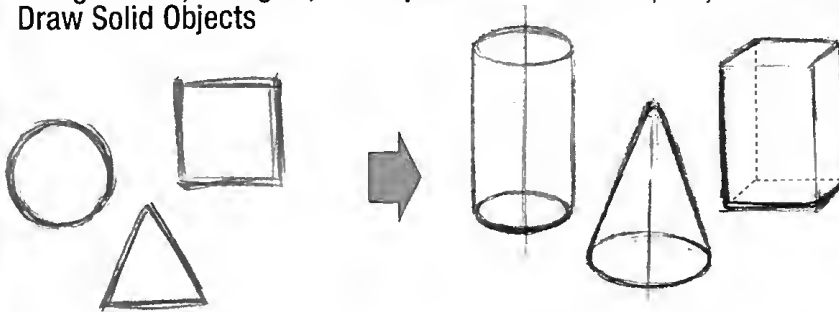
A tube (cylinder) appears three-dimensional when an ellipse is used to portray its cross-section.

This book focuses on personal effects or objects that surround a character, particularly targeting objects located below eye level. (Objects above eye level constitute the background or setting.)

Chapter 1 teaches tricks to drawing forms ranging from simple geometric shapes to solid objects and ellipses.

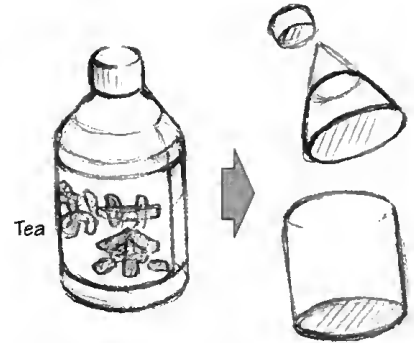


### ● Using Circles, Triangles, and Squares to Draw Solid Objects



Basic circle, triangle, and square

A cylinder (tube), cone, and rectangular solids are the base form of almost any object.



Break up complex solids into simple solid forms to make drawing them easier.

Chapter 2 covers how to draw personal effects that round out a character's sense of presence, like glasses, hats, shoes, and bags.

Chapter 3 covers props used to portray daily scenes, such as small items like cups and trays or large items like bicycles.

Chapter 4 discusses how to draw items that primarily appear in action scenes and which enhance the world you are attempting to create, such as swords or guns, etc.



# There Are Fixed Rules Guiding How an

## 1. Dividing the Composition into a World Above and a World Below

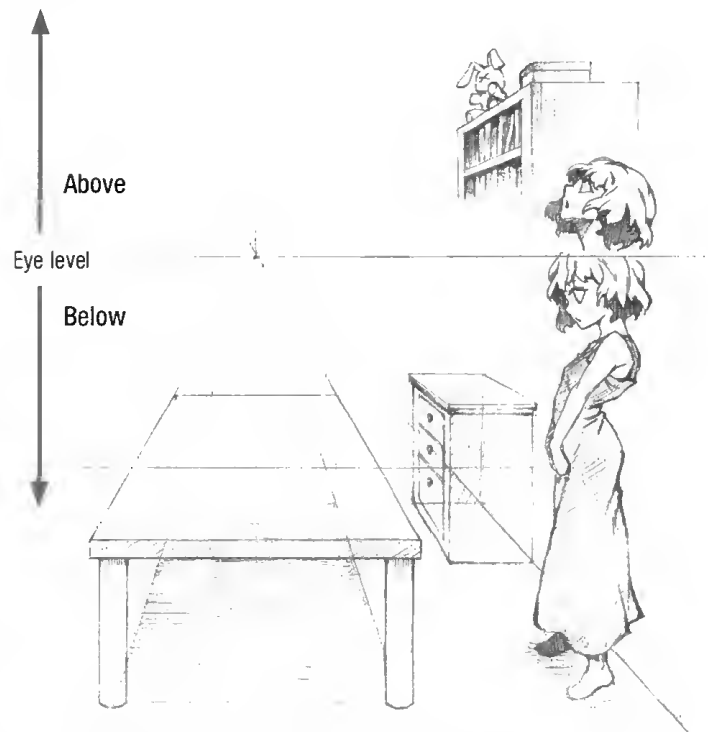
An object's shadow changes according to the angle at which it is seen or the type of lens used to capture it.



Looking up: The world above

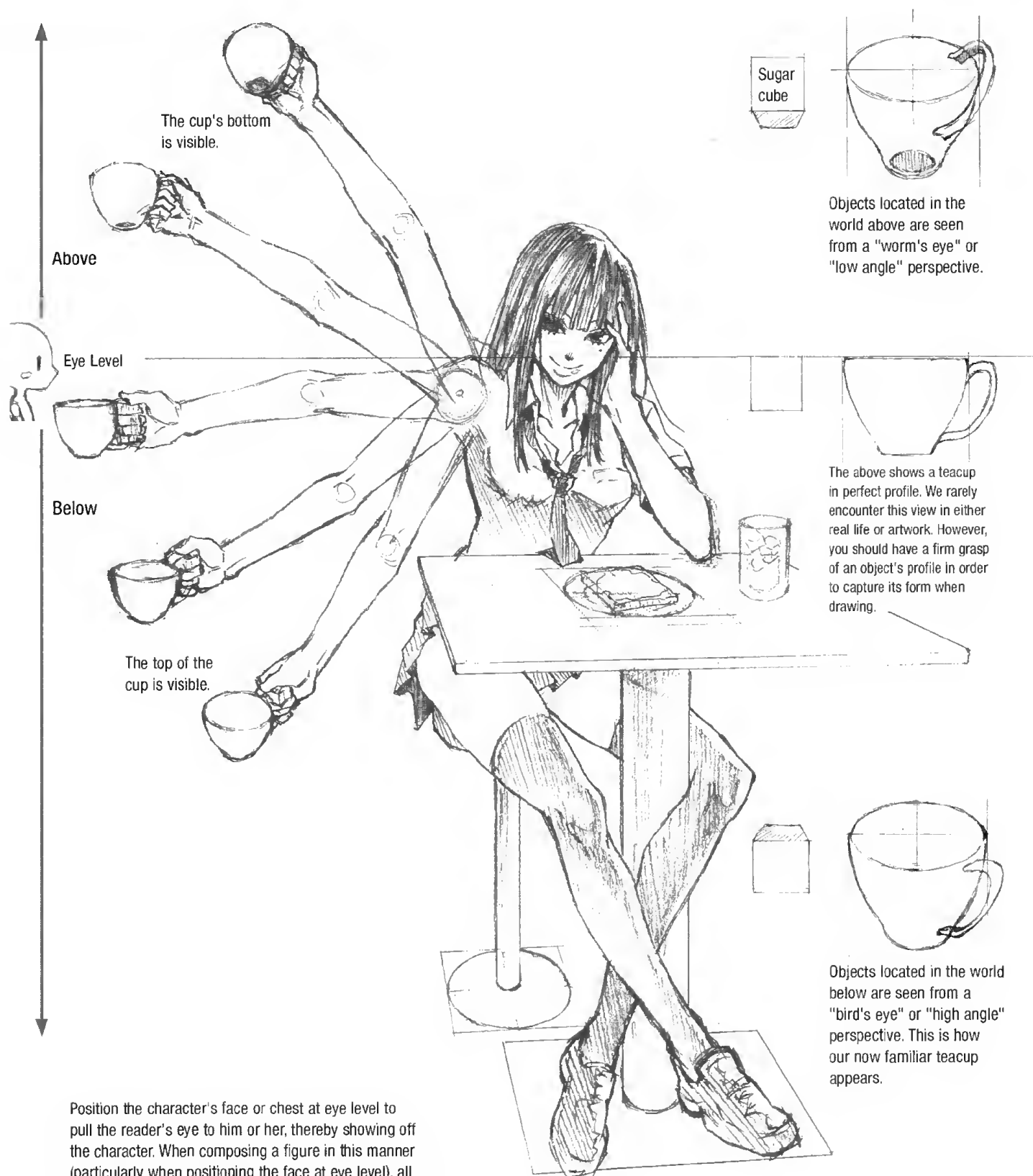


Looking down: The world below



The base or bottom of objects above eye level is visible, and the upper surface is obscured from view. The top of objects below eye level is visible. Most objects drawn with a character fall into one of those two categories. (When drawing the background, establish where eye level is located and divide the background into a world above and a world below.)

# Object Appears



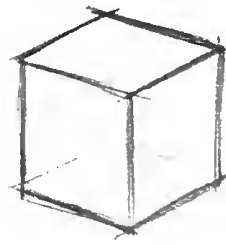
Position the character's face or chest at eye level to pull the reader's eye to him or her, thereby showing off the character. When composing a figure in this manner (particularly when positioning the face at eye level), all body parts etc. below the face fall into the world below and should, therefore, be drawn from a high angle.

## 2. Using a Standard Solid

In this book, we refer to solid objects not drawn in perspective as "standard solids." Artists often draw objects held in the hand or dishes resting on a table as reference objects and use them in compositions where they do not intend to emphasize the perspective.

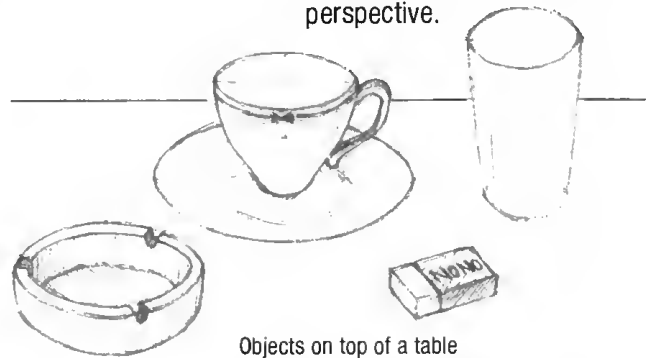


The cup held by the girl is not drawn in perspective.



### Standard Solid

Standard solids are not drawn in perspective. Sides that face each other may be drawn parallel to one another, so the objects appear to be solids, even though they are not in perspective.



Objects on top of a table



Objects naturally seen from above or automobiles drawn at a distance are rendered as standard solids.

### Drawing Ellipses

Draw an ellipse using a central axis and a straight, vertical line.



① Establish the central axis of an object.



② Draw a vertical line intersecting the central axis.

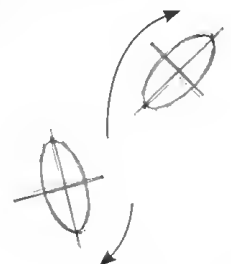


③ Sketch a layout of an ellipse around this central point.



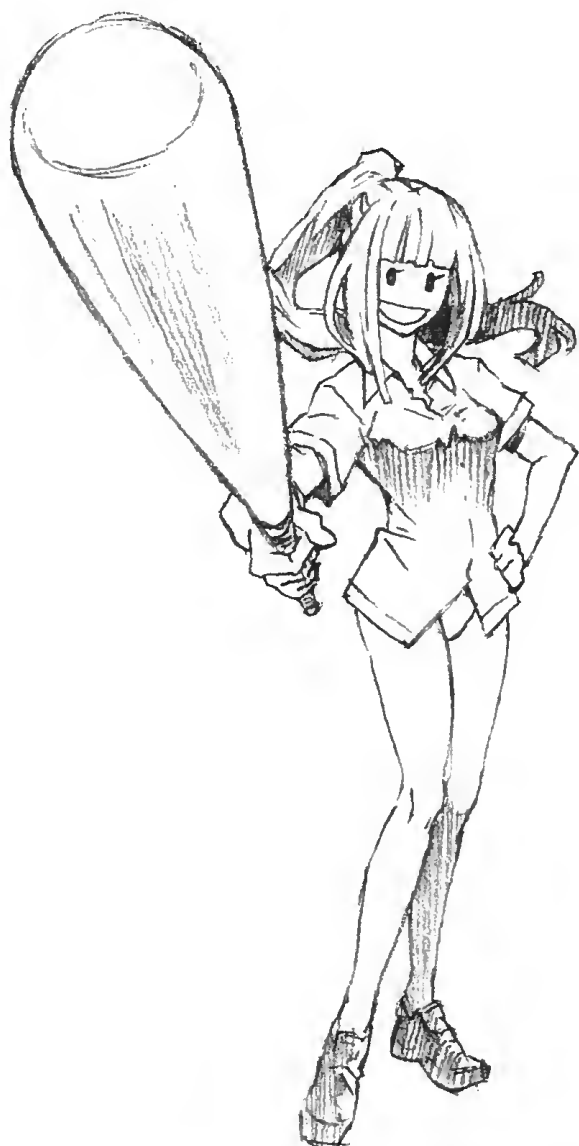
④ Clean up the ellipse so that it is symmetrical from top to bottom and side to side.

Viewing an ellipse from various angles makes it obvious that the ellipse is distorted. Rotate your paper when drawing ellipses.

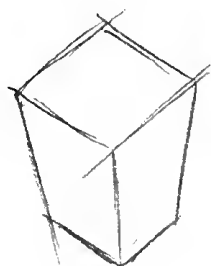


### 3. Capturing Objects in Perspective

This book refers to solid objects drawn in perspective as "objects in perspective." Artists use objects in perspective to create impact like that found in photographs taken with a wide-angle lens.



In the wide-angle lens style figure above, the sense of perspective is heightened, and forms are likewise exaggerated.



#### Object in Perspective

Objects in perspective are drawn with an exaggerated sense of perspective to accentuate a three-dimensional feel. Objects are typically drawn in one-point perspective.



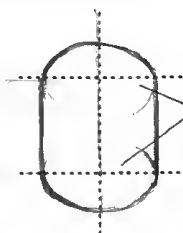
#### Actual size

\*While baseball bats come in various sizes, draw one with a length and width that fit the character's image.

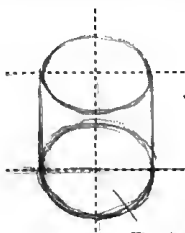
Ref.: When portrayed from a distance, the figure is drawn as a standard solid, and no sense of perspective is emphasized. A figure like this would typically appear in an expositional scene.

#### Objects in Perspective and Ellipses

##### Standard object



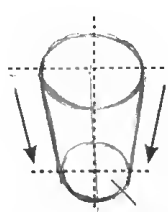
##### Object drawn in perspective



Ellipses drawn in the same perspective

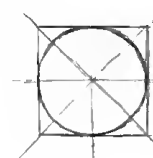
The bottom ellipse should be rounder than the top.

Draw ellipses using a central axis and a vertical line when portraying both standard objects and objects in perspective.



Use one-point perspective for the side lines.

The bottom ellipse should be rounder than the top.



Using a square as a guide when drawing a circle will give you a clean, freehand circle. However, there are problems with this technique.



Incorrect

If you use a cube to draw an ellipse in this manner, you will end up with a distorted ellipse. This technique can not be used for ellipses.

## Drawing a Corridor Using One-Point Perspective

This is a typical technique used to give impact to a key composition.

### ● Create a Sense of Depth Using Large and Small-scaled Objects

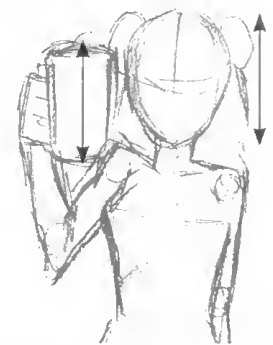


Make objects close to the picture plane large and distant objects small. This gives the composition's center a sense of depth.

Standard object



Actual size



Use the figure's head as reference when drawing the mug.

There are two conditions to using large and small-scaled objects to create a sense of depth.

- You must know how large the object actually is.
- Both the large and small object must be the same.

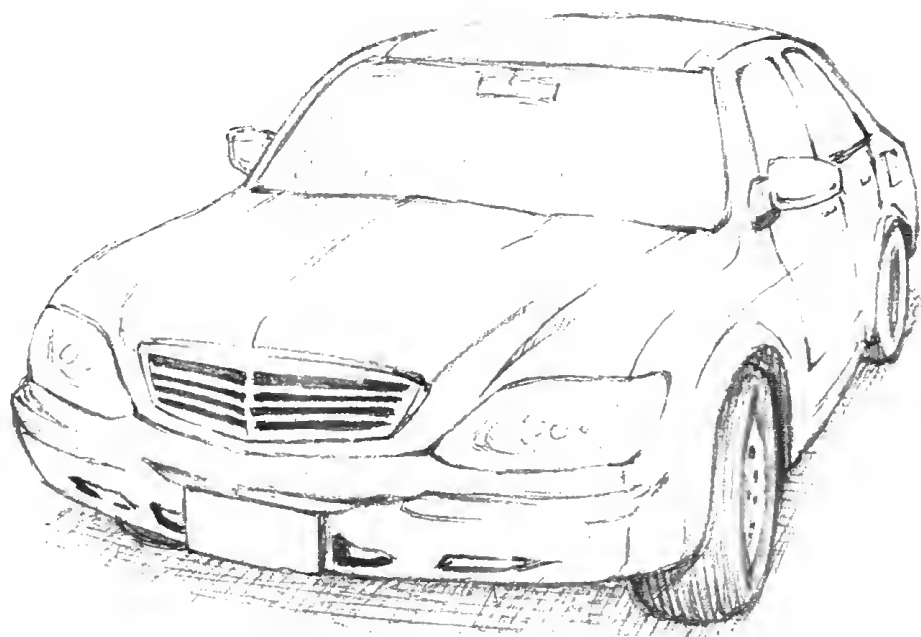
You need a drawing that shows just how big the object really is when held. This is when a composition using standard objects comes into play.



Even though this gun is a 3/4 view drawn at a low angle, it is still not in perspective.



● Using Depth to Create Impact



**High Angle, Wide Lens Rendition**  
This portrayal emphasizes a sense of weight and luxury in the car. Simulated two-point perspective is used to accentuate the sense of depth and breadth. The addition of speed lines creates a sense of movement.



Making an object held out or pointed toward the picture plane large gives the composition impact. This technique is used in scenes where fists, guns or swords are thrust forward.



The above is drawn from a moderate low angle as if scene through a wide-angle lens. This imbues objects moving toward the picture plane with a sense of speed and power.



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## Chapter 1

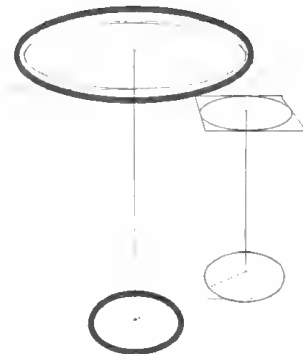
# The Basics in Drawing Characters and Props




# Capturing Objects Using Circles, Triangles, and Squares


Before making yourself aware from the start of the object as a three-dimensional solid, try to capture its basic form using simple geometric shapes.

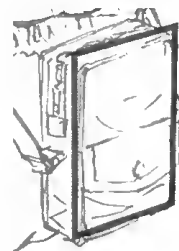
 Circle: A circle can represent a tabletop or a dish. It also constitutes the base form of an ellipse.



 Triangle: A triangle can represent a cup or a plastic bottle.



 Square: A square (or rectangle) can represent a handbag, a cell phone, or other similarly shaped object.



A human figure can also be expressed as a combination of circles and squares.



## Using Circles, Triangles, and Squares to Capture a Composition

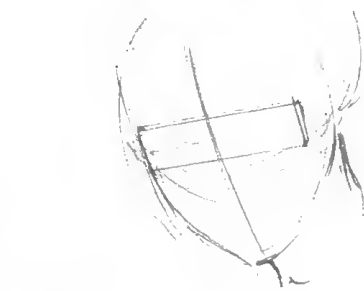


Circles, squares, and rectangles can be used to capture the basic forms of the remaining objects around the human figure.

Glasses



The two lenses are captured as a unit and represented with a rectangle.



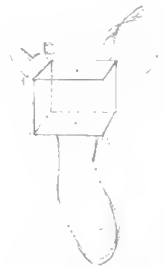
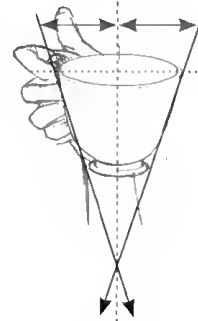
The lenses and the frame can be grouped together and represented using a block.

Cup



The cup's right and left sides must have uniform slopes. Imagine the cup as a triangle.

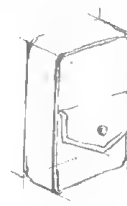
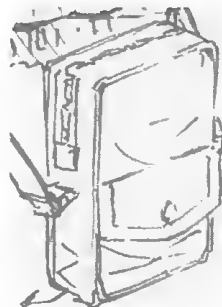
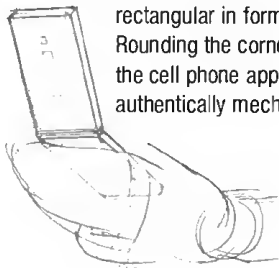
Central axis



Layout captured as a standard solid

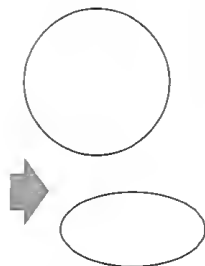
Cell Phones, Bags

As is obvious at a glance, cell phones are basically rectangular in form. Rounding the corners makes the cell phone appear authentically mechanical.



To draw a bag, start with a standard solid. Do not be overly concerned with perspective (i.e. diagonal lines indicating depth).

Tables and Dishes



Ellipses: A circle becomes an ellipse when viewed from an oblique angle.

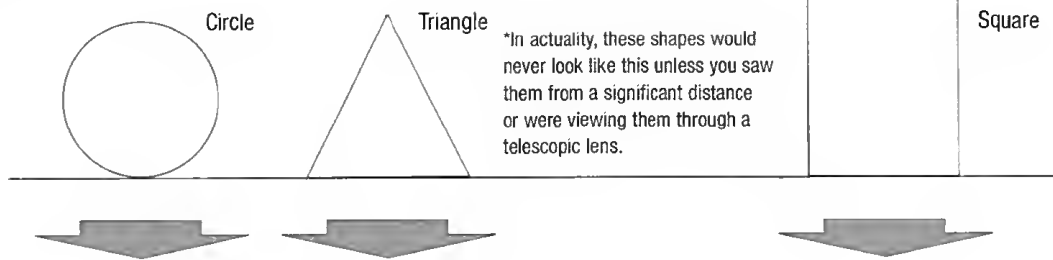


Circles with de-emphasized perspectives positioned on a tabletop just appear different in size. Draw all as ellipses positioned at the same angle.

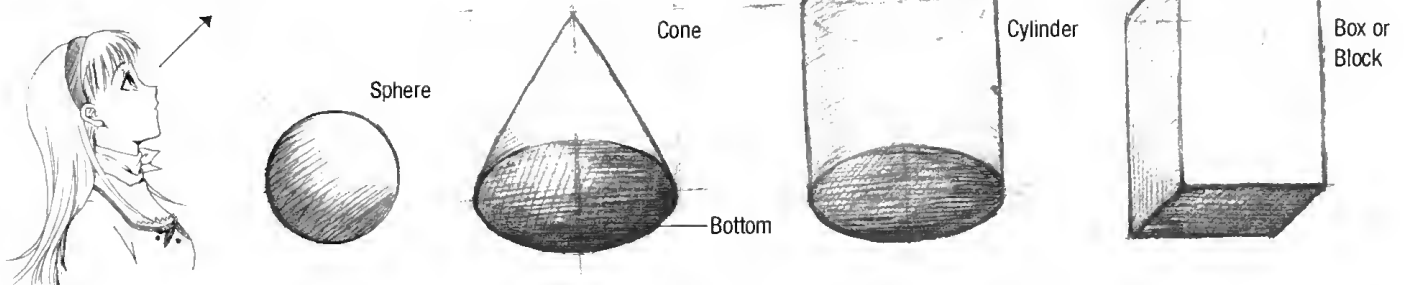
# The Angle of Perspective Is the Key to Compositing Objects

Being aware of the angle of perspective allows you to draw triangles, rectangles, and squares as solids.

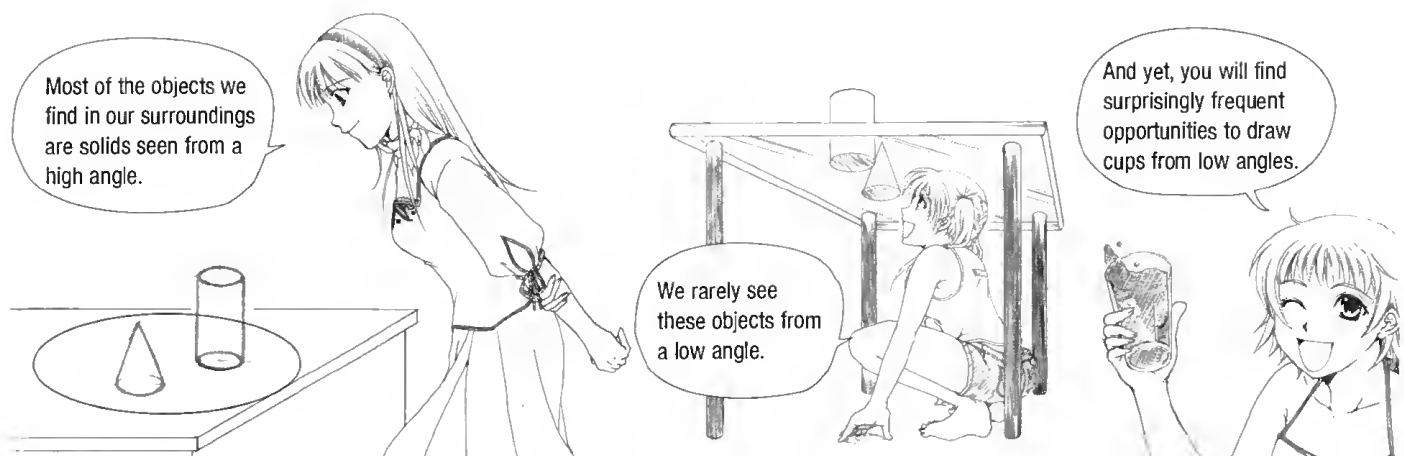
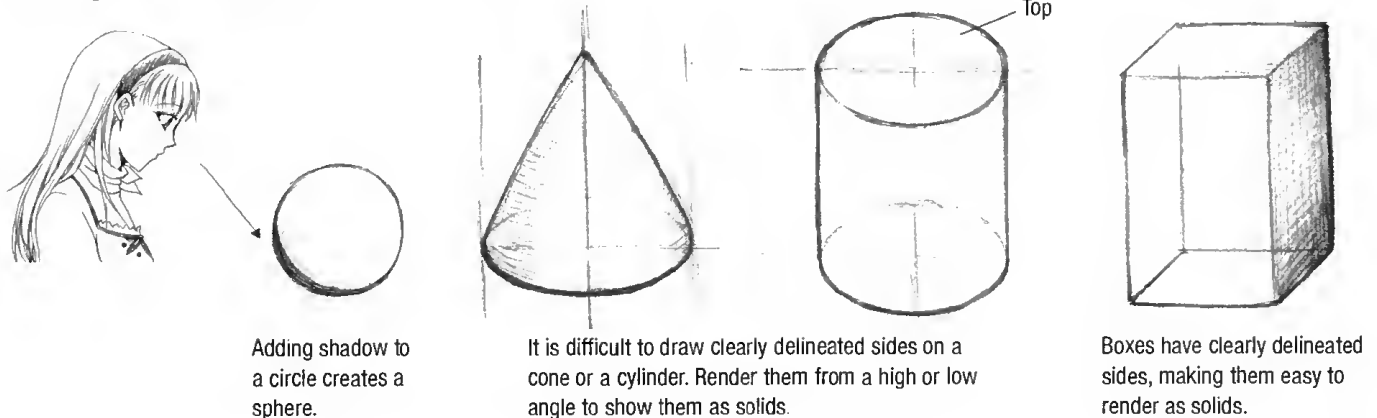
## Shapes in Profile



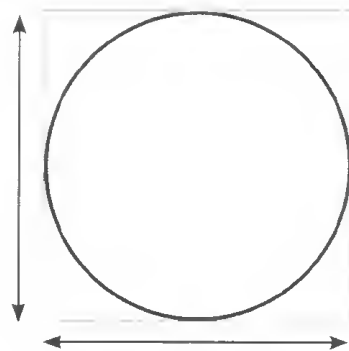
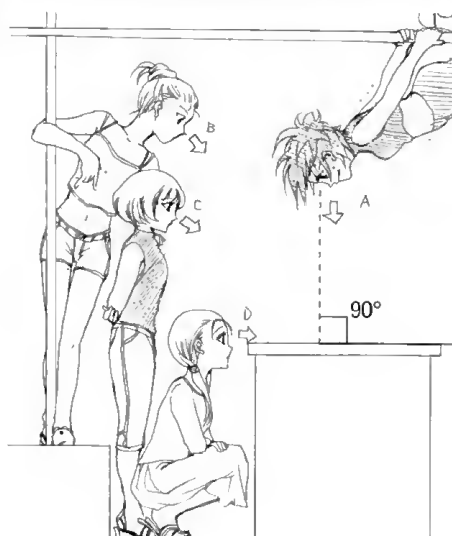
## Looking Up—Low Angle



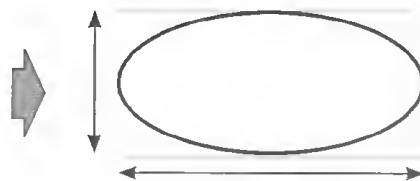
## Looking Down—High Angle



## The Basic Rules of Ellipses



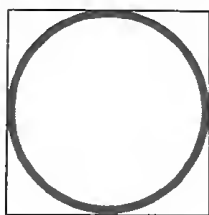
Seen from directly overhead  
The lengths are virtually identical  
from top to bottom and side to side.



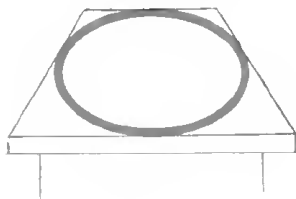
Seen from an oblique angle  
The object has shortened from top to  
bottom, turning it into an ellipse.



90°  
Object viewed from  
directly overhead



60°  
Object seen from  
a moderately high  
position



45°  
The object viewed  
from a common  
standing position



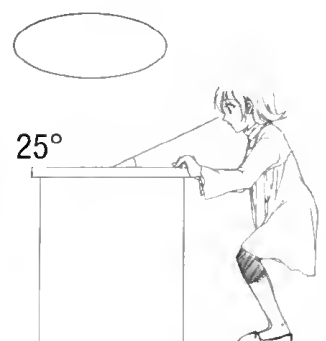
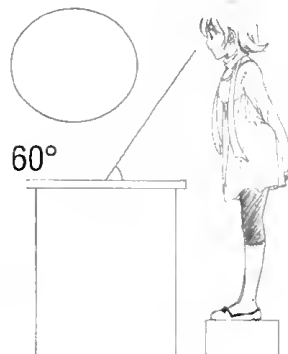
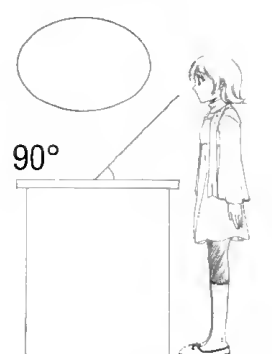
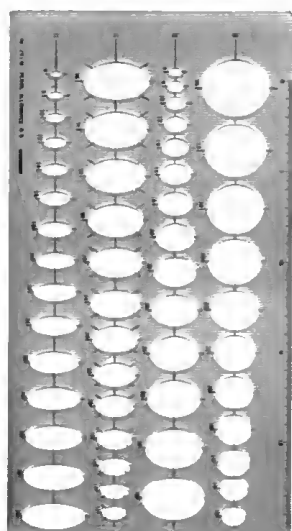
5° to 15°  
The object viewed  
from an extremely  
low position



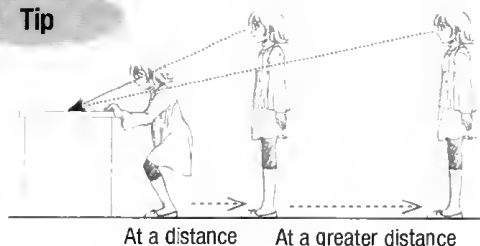
The lower the position, the more the circle appears squashed  
and flattened out.

## Ellipse Template

Ellipse Template



**Tip**



Even though the second figure  
is standing, the distance from  
the desk causes her to view the  
circle from the same 25° angle  
as the crouched figure.

A figure standing even farther  
from the desk causes the  
circle to become an even more  
flattened ellipse (10° to 15°).



There are templates with ellipses from  
common angles (25°, 35°, 45°, 60°). There are  
also templates with ellipses ranging from 5°  
to 15°. When drawing *manga*, first sketch the  
composition's under drawing in pencil and then  
go over it with a technical pen.



# Drawing Ellipses How to Use a Template

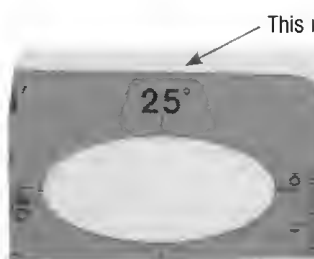
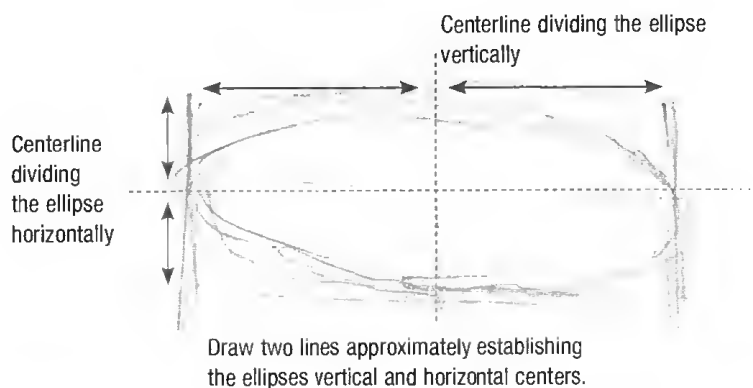
The techniques for drawing curves for the top or bottom of a can are the same as those for a cup, plate, or car wheel. Here, we examine the steps in drawing a can to learn how to use a template.

## Drawing a Can

### 1. Capturing the Form

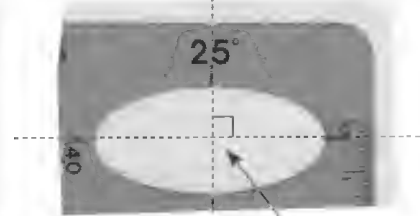


Roughly sketch the ellipse.



Use the short lines off to the side to align the vertical and horizontal centers.

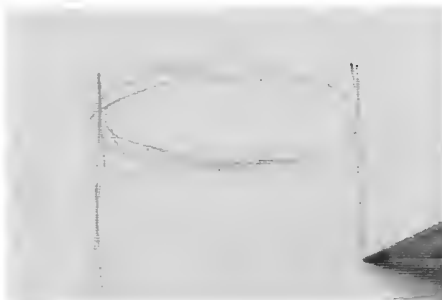
This means a circle seen from a 25° angle.



The vertical and horizontal centerlines intersect at a 90° angle.



① Sketch a rectangle to match the ellipse's desired shape and then sketch the ellipses layout within the rectangle.



② Sketch a layout of the can's sides.



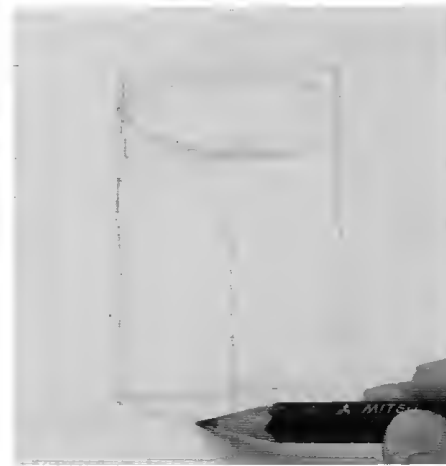
③ Draw a vertical centerline that is parallel to the layout's side.



④ Draw a horizontal line that indicates the can's approximate height.



⑤ Draw a horizontal line indicating the center of the can's top.

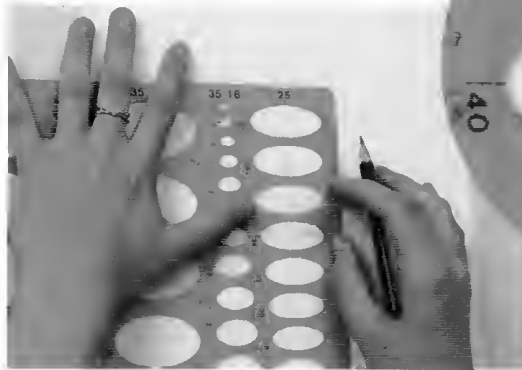


⑥ Draw the ellipse representing the can's bottom.

## 2. Drawing the Top Ellipse



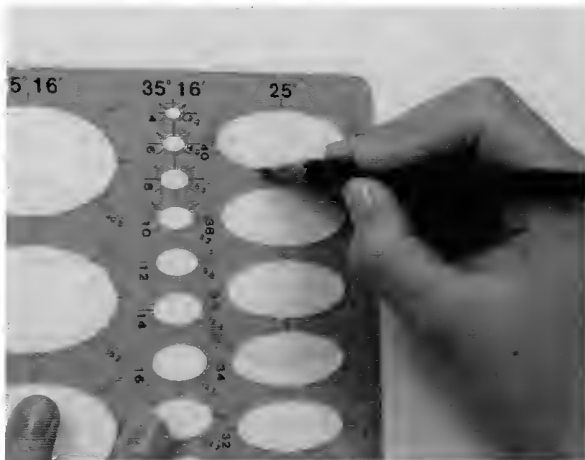
① Lay the template in the target position. Lay the template in the target position.



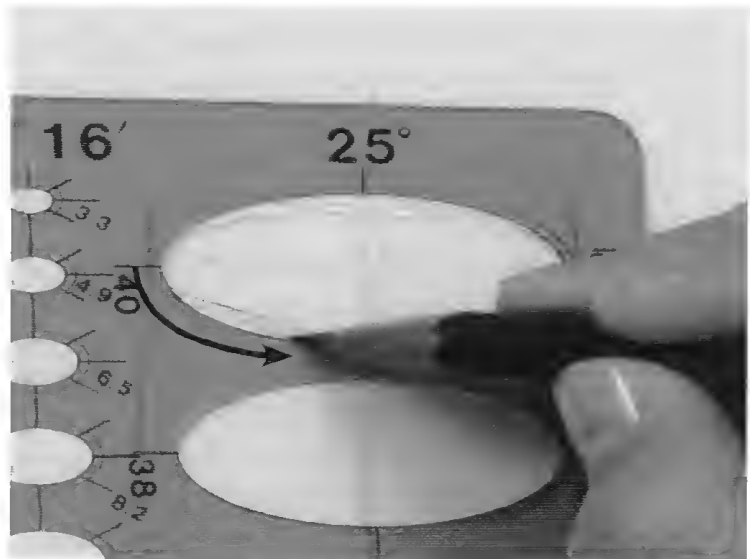
② Carefully align the template to the paper so that it lies perpendicular to the composition.



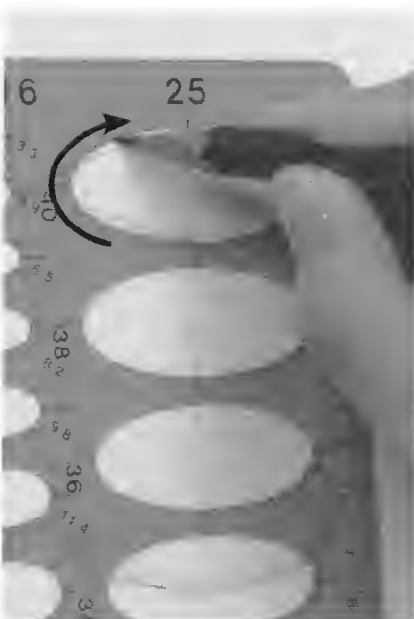
Template ellipses rarely perfectly match the image you have in your mind. Select an ellipse whose height and width most closely match your image.



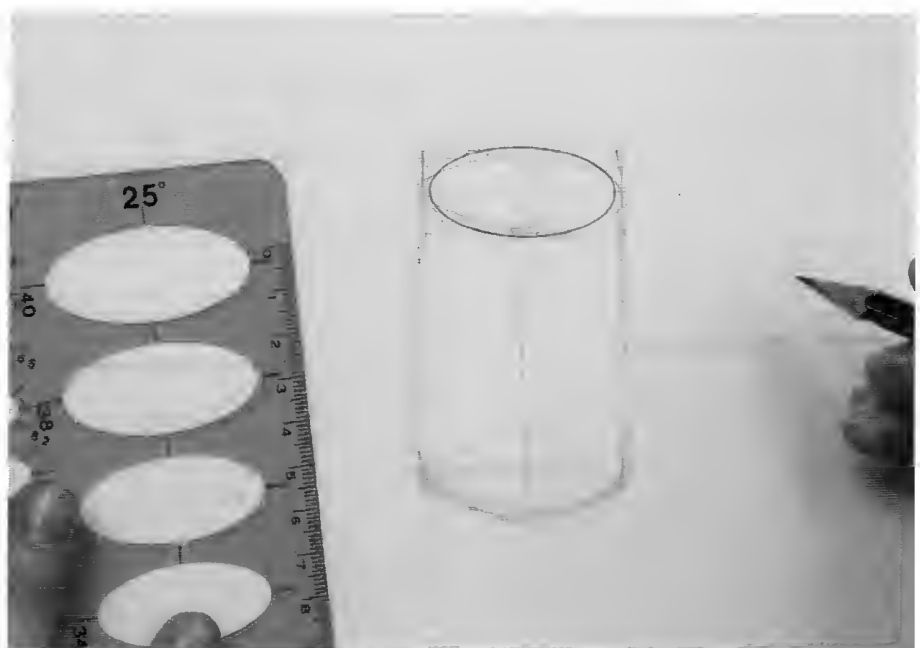
③ Firmly hold down the template so that it does not slip around.



④ Ellipses have two sharp curves on each side, Start drawing the long, gentle curves first.

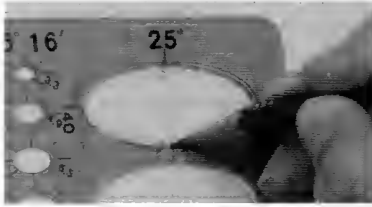


⑤ Draw carefully to prevent the template from shifting.

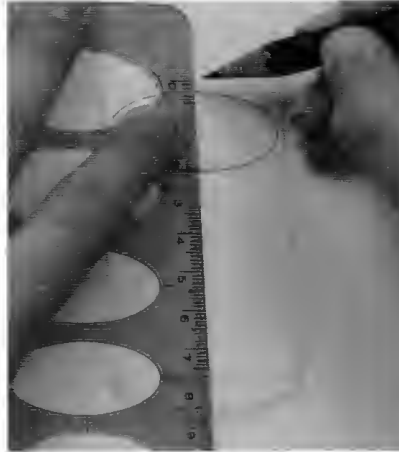


⑥ This shows the finished top of the can.

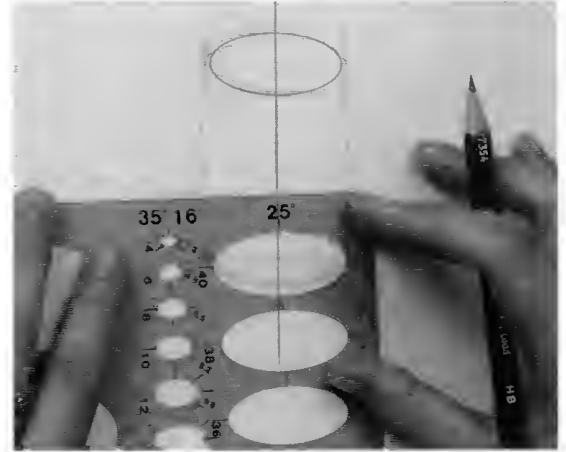
### 3. Drawing the Bottom Ellipse



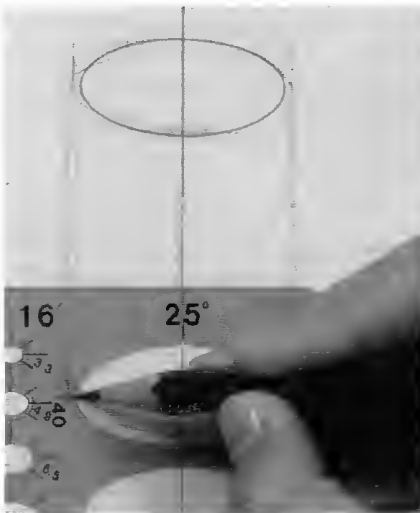
① Once again, lay the template in the target position for the top ellipse and draw points at the top and bottom of the ellipse's center.



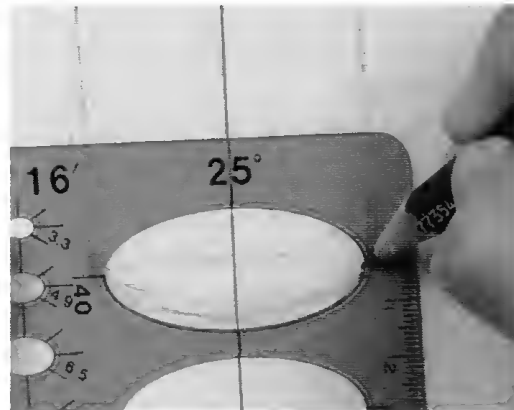
② Draw a straight line to connect the top and bottom points. This constitutes the can's vertical centerline.



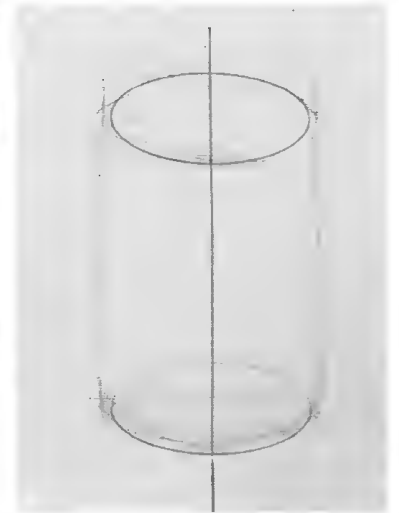
③ Match the horizontal centerline to the vertical centerline. Select the same-sized ellipses from the template.



④ Only the front, center of the bottom ellipse will be visible, so draw the ellipse from the horizontal centerline.

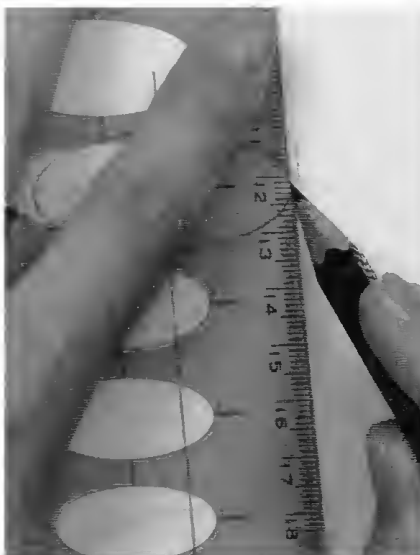


⑤ Lightly sketch in the remainder of the ellipse to create a three-dimensional object. The front curve is touching a base, so use thicker strokes.

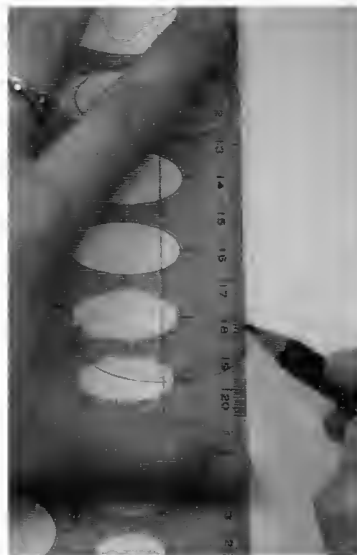


⑥ This shows the finished top and bottom ellipses.

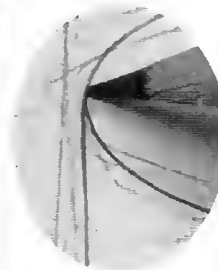
### 4. Drawing a Cylinder



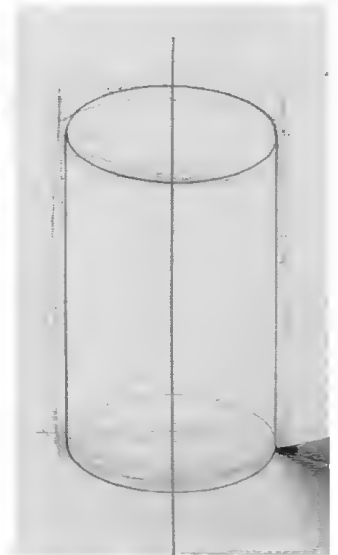
① Draw a line from the tip of the ellipse.



② You may use the template's side as a straightedge instead of a ruler.

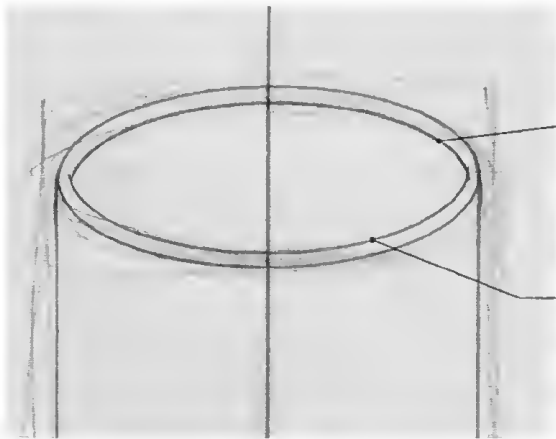


③ Carefully draw the line so that the ellipse and the can's side are not off. Carefully connect the ellipse and the side, while checking to make sure you do not leave a gap and to make sure they touch correctly.

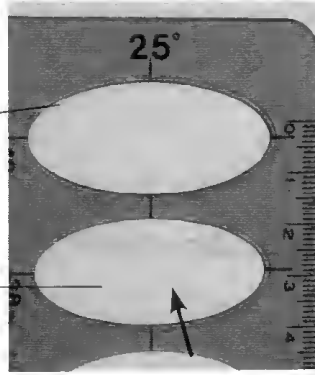


④ This shows the finished cylinder, which is the can's basic shape.

## 5. Adding the Rim

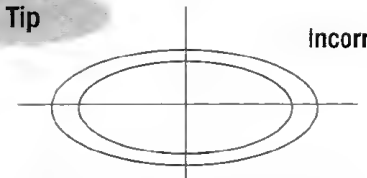


① Draw a smaller ellipse just inside the first ellipse.



Use an ellipse that is slightly smaller than the first ellipse.

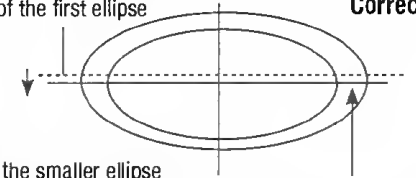
**Tip**



**Incorrect**

When drawing the smaller ellipse, aligning its horizontal centerline with that of the first ellipse will have a flattening effect.

Horizontal centerline of the first ellipse

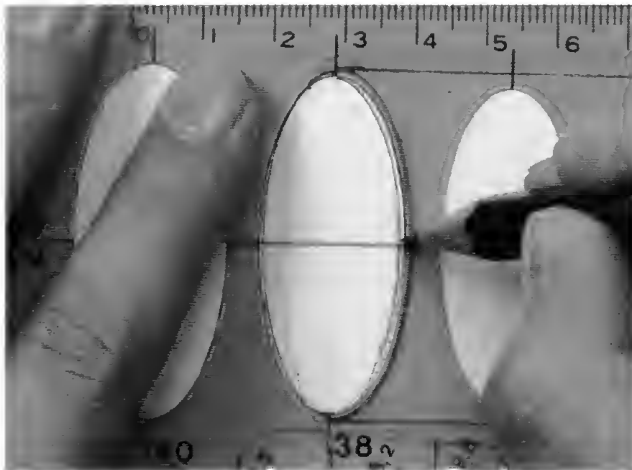


**Correct**

Draw the smaller ellipse so that it is shifted slightly forward from the first. Do not shift the vertical centerline.

If the gaps lying to the right and left seem too wide then shift the template around closer to the first ellipse's sides as you draw the second ellipse.

Shift the template horizontally about 1 millimeter.



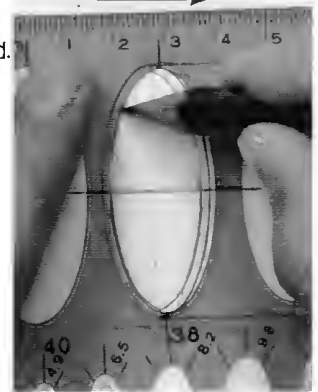
② Start by drawing the back rim. Keep a slight gap between the second and first ellipse. You will need to alter the ellipse's size. Start by drawing the upper half.



Shift the template downward.

③ Shift the template slightly downward and draw the curved sides so that the ellipse that it connects cleanly with the rim curve.

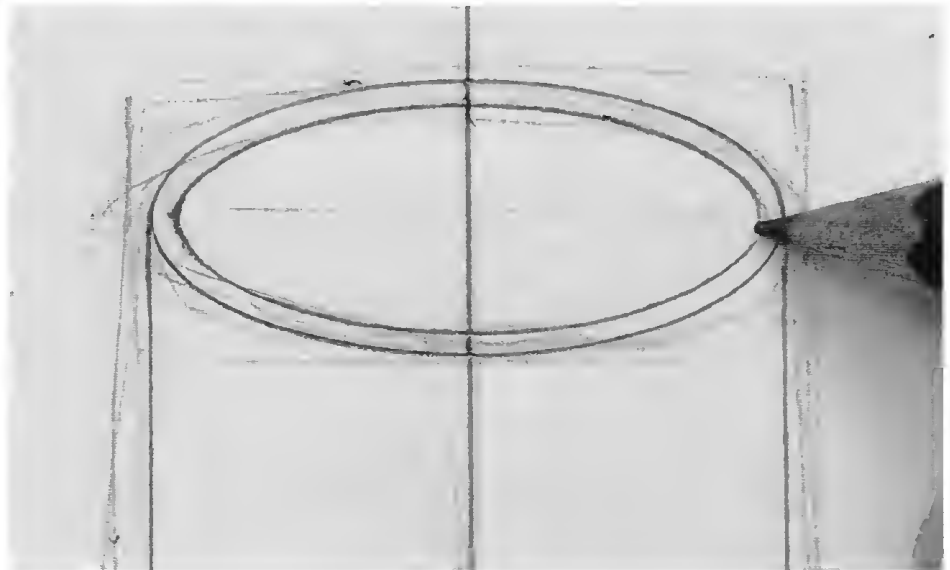
Shift the template about two millimeters.



④ Position the template so that the foreground inner curve will be closer to its corresponding outer curve than the two far curves.

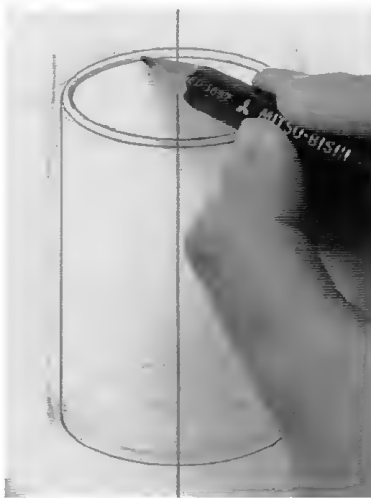


⑤ Adjust the curves so that they connect smoothly.



⑥ In order to give the rim of a cup or can the illusion of volume, adhere exactly to the template when drawing only the outer ellipse. Draw detailed or short curves of the inner ellipse using freehand in order to create a sense of thickness.

## 6. Adding Thickness to the Rim

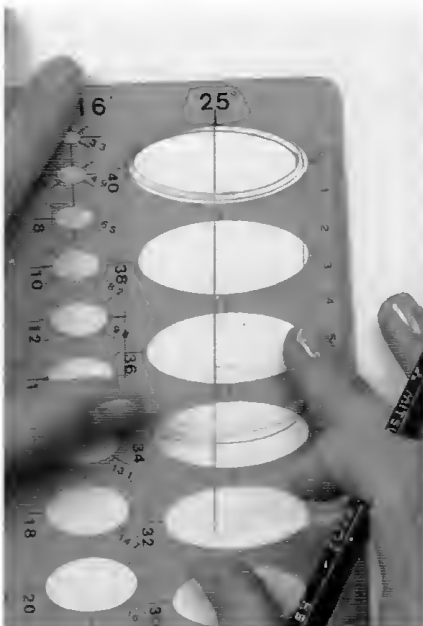
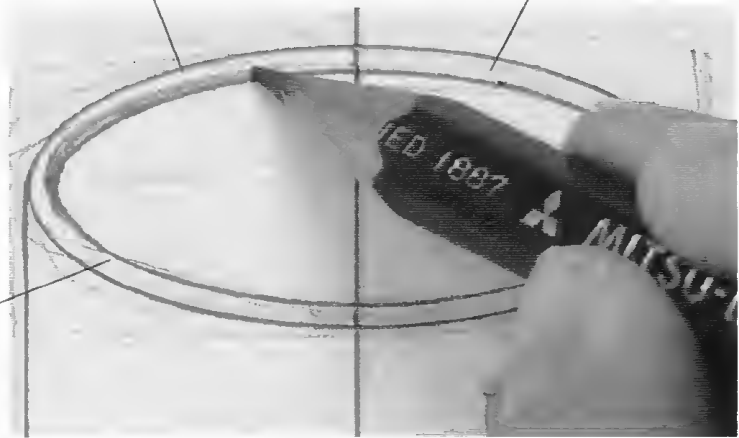


① Draw a freehand curve as a guide to give thickness to the rim.

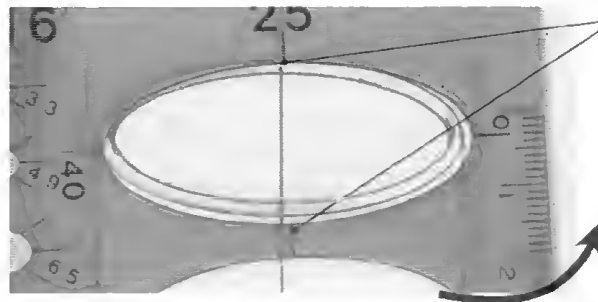
Establish the rim's height so that the back rim is thinner than the front.

This line gives the rim its width and height. The rear rim should be wider than the portion close to the picture plane.

The rim's side lying toward the picture plane should be thicker than the far side.



② Tilt the template and look for a curve that matches the image in your mind's eye.



These marks indicate where a vertical line lies on the original circle. It allows you to determine the angle at which the ellipse tilts.

\*Use the template as a tool for drawing clean lines while you search for the curve that best suits your image.

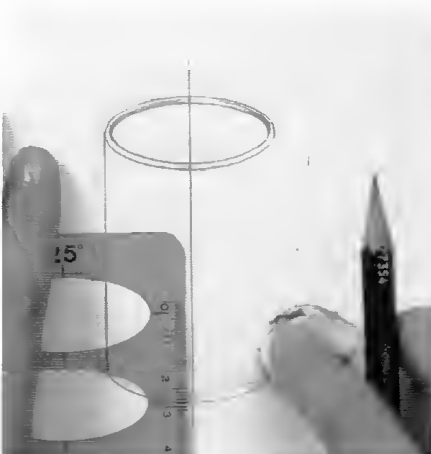


③ Establish an angle that matches the image in your mind and draw a curve that clearly indicates the height and width of the rear rim.

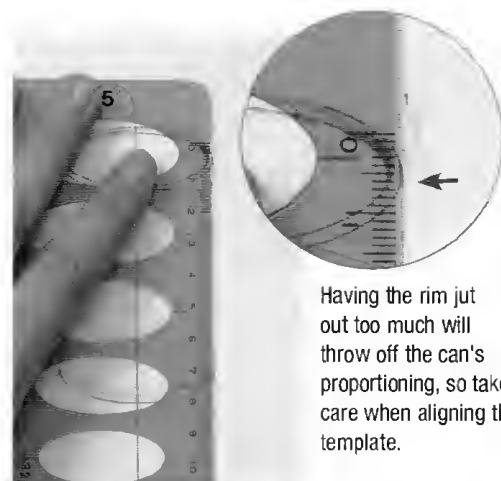


④ Adjust the two ends of the curve freehand. When drawing a close-up, look for a curve on the template that best matches this area and use that.

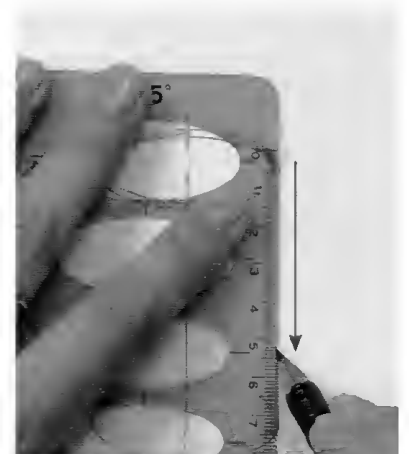
## 7. Cleaning up the Sides



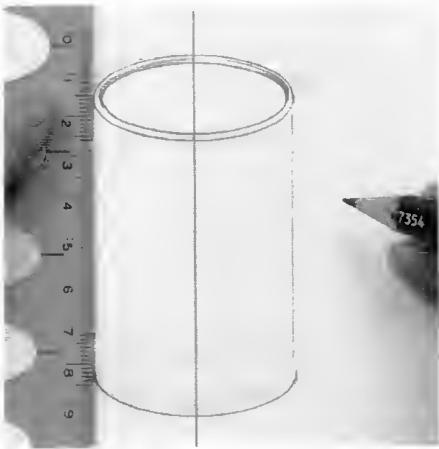
① Clean up the sides, erasing any sketched, tentative lines.



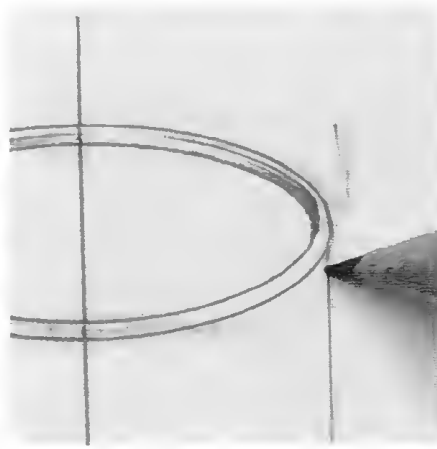
② The can's rim juts out just barely further than its sides, so bring the template in slightly.



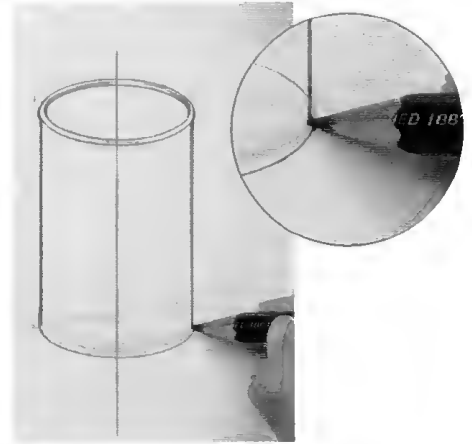
③ Hold the template down so that it will not slip and draw the line using a single stroke.



④ Follow the same process for the can's other side.

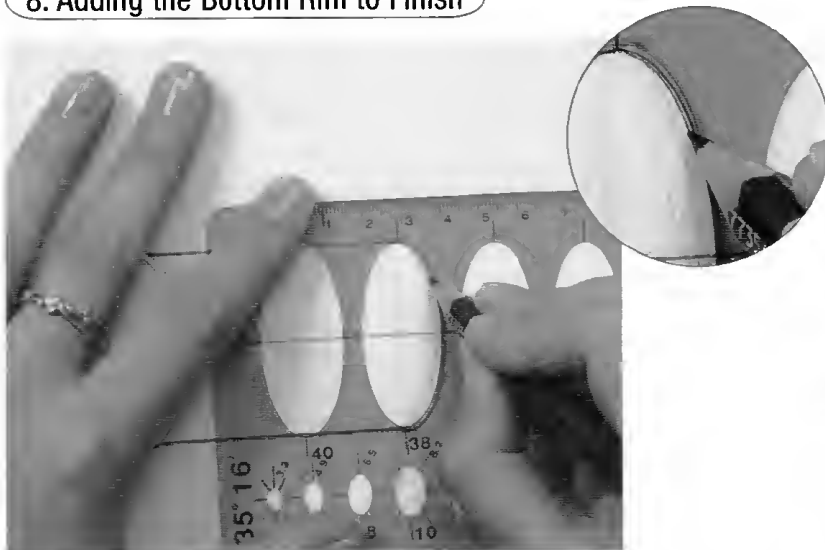


⑤ Connect the line to the rim so that no gaps form.



⑥ Sketch a layout of the bottom rim, adding thickness.

## 8. Adding the Bottom Rim to Finish



① Add an inner curve that matches the outer curve. Above, the artist is using an ellipse that is one size smaller than the first ellipse used.



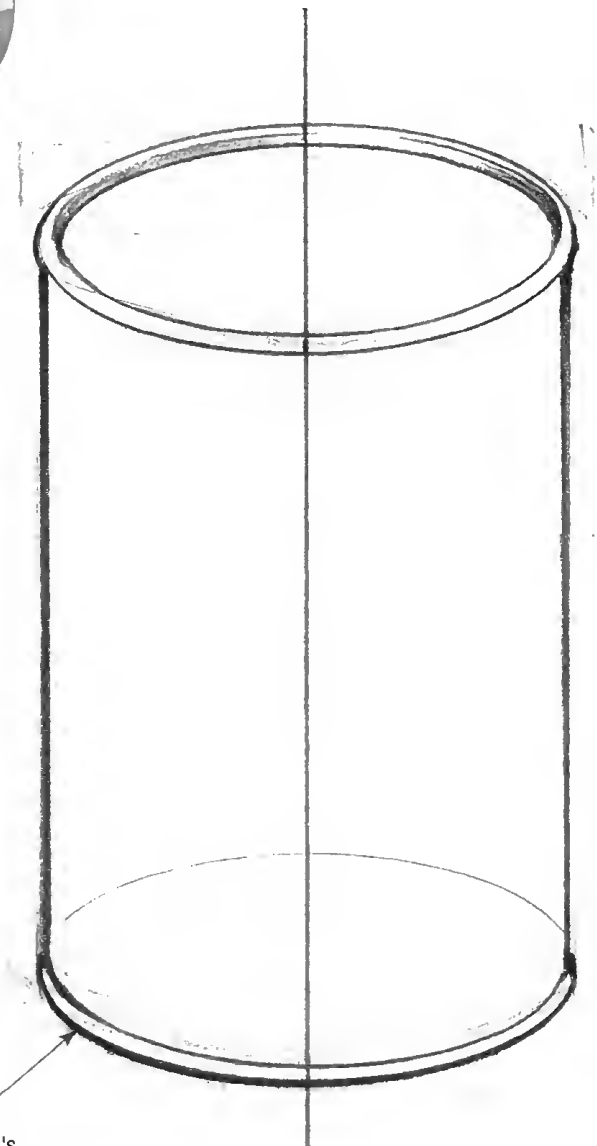
② Clean up the lines freehand, as you did for the top rim.



③ Carefully add the portion of the rim that juts out.

### Tip

Use thicker strokes for the portion touching the base. This allows you to portray the can's shadow, caused by the rounded rim. Adding thick lines like this imbue objects with stability.



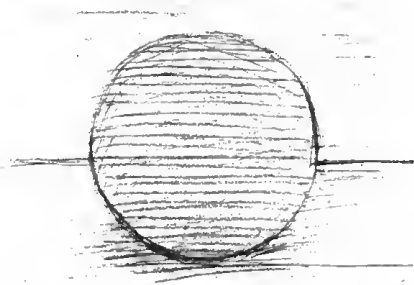
④ Final Image

# Hatching

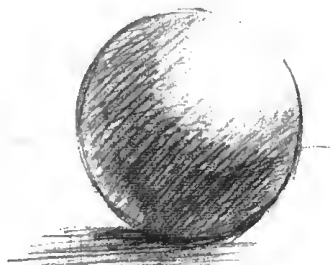
Two vital elements in portraying objects are suggesting three-dimensionality and suggesting texture. Let us look at using hatching to suggest these two elements.

## Using Light and Shadow to Suggest Three-Dimensionality

### Objects



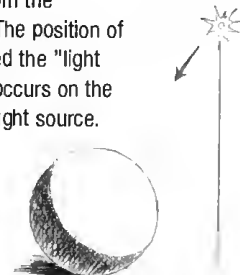
When little light is present, objects melt into shadow and do not have a strong sense of three-dimensionality.



When light is present, a strong contrast develops between light and dark areas, evoking a look of three-dimensionality.

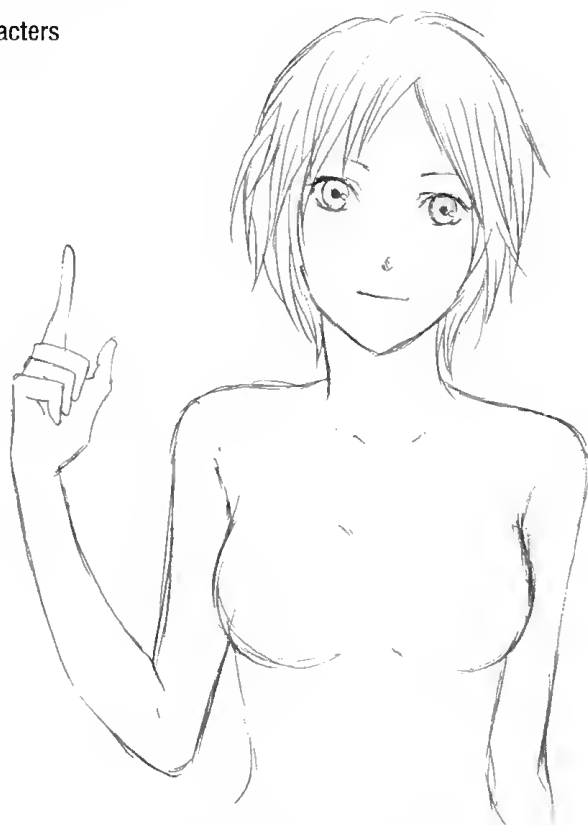
Shadow results from the presence of light. The position of the lighting is called the "light source." Shadow occurs on the side opposite the light source.

Light source



Shadow becomes dark when a strong light source is present. Here, white is used to portray the area light touches.

### Characters



Without the presence of a set light source, there are no shadows.



A flame flares up on our girl's fingertip. Now shadows appear, and she looks three-dimensional.

### Ref.: Mountains



A light source is located in the upper left.



A light source is located in the upper right.

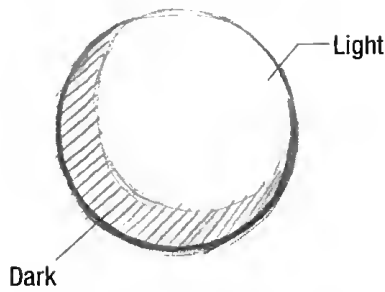
Even if the light source does not physically appear in the composition, applying shadows in a fixed manner indicates to the viewer where light and the light source are located. This is known as "establishing a light source."



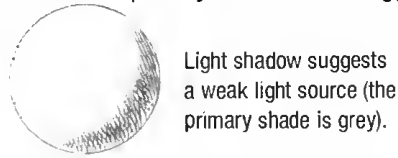
# Light-and-Shadow Produced "Light, Medium, and Dark Shades"

The contrast between light and dark causes objects and figures to look three-dimensional. "Medium" shades occurs between "light" and "dark" shades and allows for enhanced three-dimensional portrayal and richer suggestion of texture.

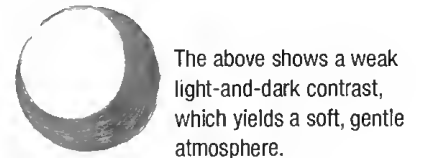
## Basic Light and Dark



The contrast of light and dark cause the circle to look like a sphere.



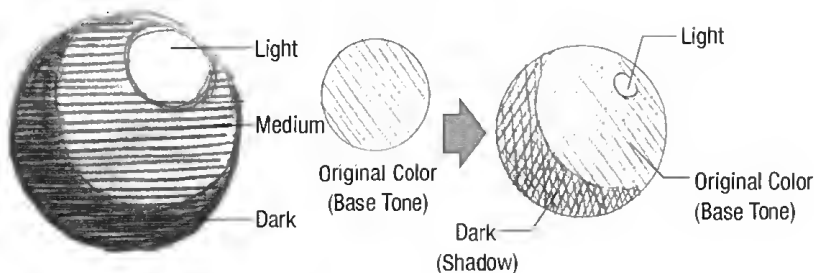
Dark shadow suggests a strong light source (the primary shade is black).



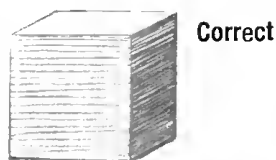
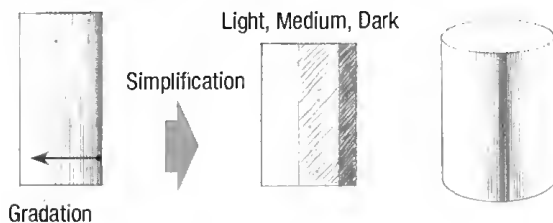
When the light-and-dark contrast is strong, the sense of three-dimensionality becomes heightened, resulting in a cold, hard image.

## Portrayals of Light, Medium, and Dark Shades

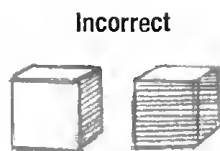
### Why Light, Medium, and Dark Shades Develop



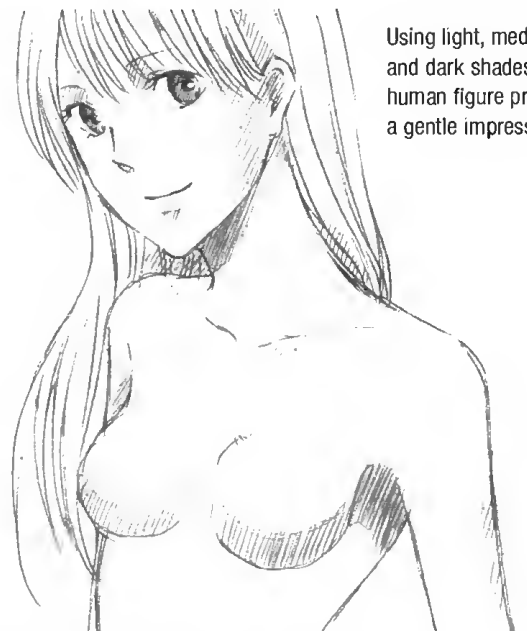
### • Three-Dimensionality through the Interplay of Light, Medium, and Dark Shades



We perceive that this box has three sides owing to the light, medium, and dark shades.

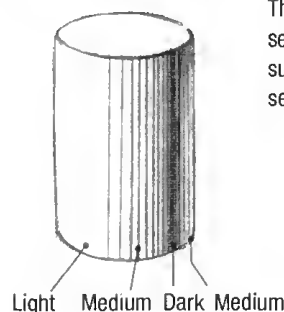


The above shows only light and dark shades.

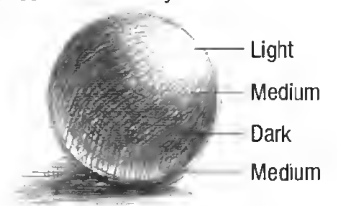


Using light, medium, and dark shades on a human figure projects a gentle impression.

### • Interplay of Light, Medium, and Dark Shades



The "medium" shade appearing after the sequence of "light," "medium," and "dark" suggests reflected light. It enhances the sense of three-dimensionality.



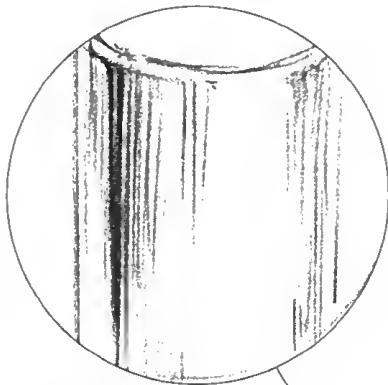
## Portraying Texture

Suggestion of texture is essential to drawing a character with props. Hatching suggests soft hair. Hatching, such as the straight strokes appearing on the can, appears on other objects as well to suggest texture.



## Distinguishing Use of Hatching According to Materials and Their Textures

Incorporate hatching using short strokes as well.



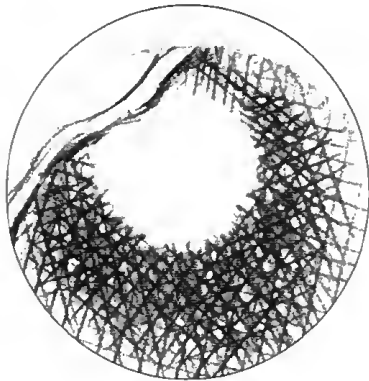
**Glass Champagne Flute**  
Use primarily straight strokes



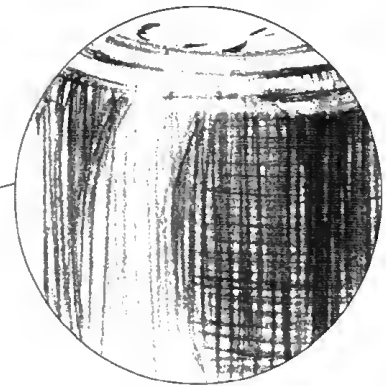
**Collar**  
(Thick fabric)  
Use primarily diagonal strokes.



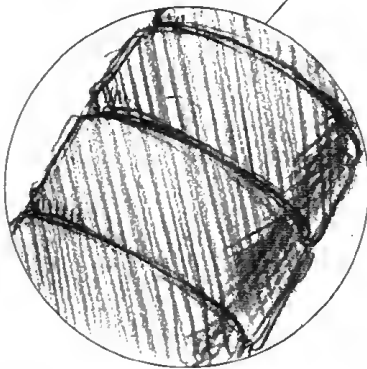
**Cargo Pocket**  
(Same fabric as the collar)  
Use thicker strokes for the button's shading to give it a three-dimensional look.



**Black Leather Brassiere**  
The light-and-dark contrast creates a strong sense of three-dimensionality. The above shows cross-hatching.



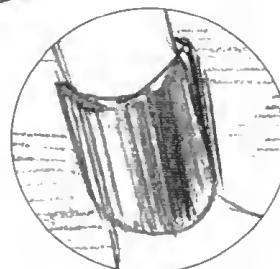
**Can**  
Regular vertical and horizontal strokes produce hatching that creates an inorganic, hard texture.



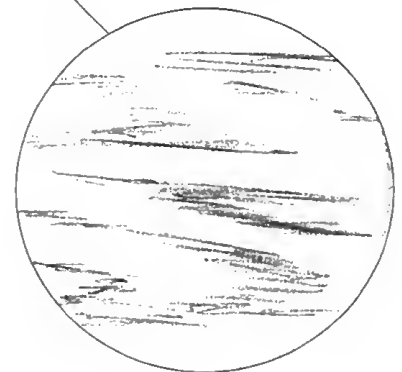
**Knife Handle**  
Omitting any areas of white suggests a material with a matte finish.



**Black Leather Skirt**  
Since the skirt is the same material as the brassiere, cross-hatching is again the prominent form of shading. Her wristband is also the same material; however, since it is cylindrical, primarily straight strokes were used to portray light, medium, and dark shades.



**Wristband**



**Wood Grain**  
Hatching was used to create the illusion of wood grain.

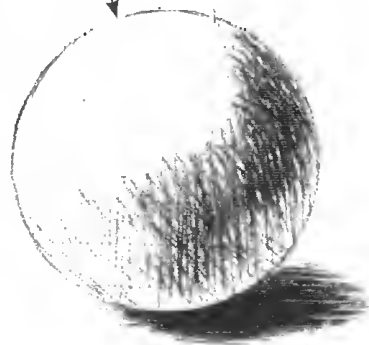
## Materials Observation and Analysis



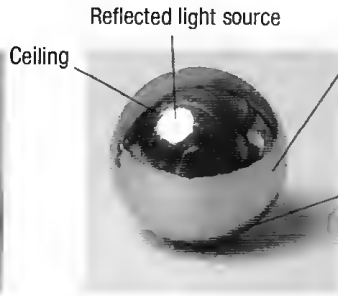
### White Sphere (Styrofoam)

The region touched by light is not visually distinct. The light-to-dark contrast is somewhat dull.

The profile contour is a thin line that wraps around from the sphere's opposite side.

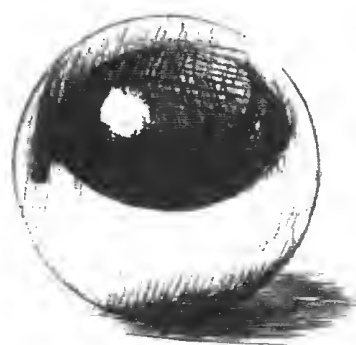


Light and medium shades of crosshatching produce the look of a light material.



### Metallic Sphere

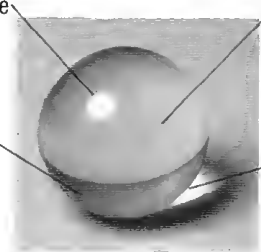
The sphere's surroundings are totally reflected on the sphere's surface. Draw in black the ceiling, people, and other objects on the sphere's surface. This sphere has a sharp light-to-dark contrast.



Crosshatching and solid black accentuates the contrast of light and dark. The black produces the heaviness of metal.

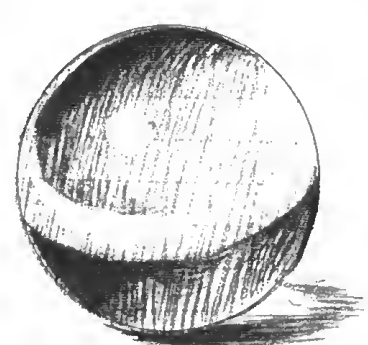
The light from the source passes through the glass, reflecting the shape of the light source.

This is the ceiling. In a transparent sphere, the sky or ceiling becomes reflected upside-down on the sphere's lower surface.



### Glass Sphere

The light source is small and round. It forms a circle of light within a shadow on the sphere's opposite side.



Fine strokes suggest light passing through the sphere.

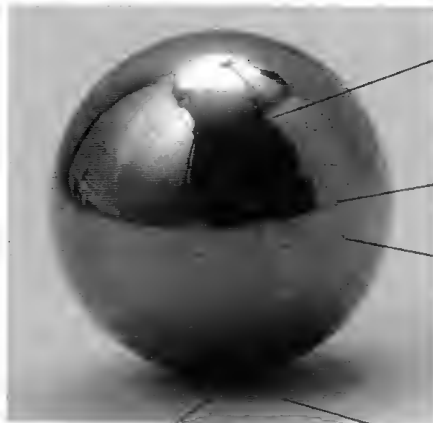
This is the tabletop. The reflected table is white and has nothing on it.

The light from the source passes through the sphere and is reflected underneath.

## Ref. How Differences in the Light Source Affect the Material's Appearance

The profile contour and the light-to-dark contrast changes, depending on where the light source is located, its shape, and its intensity.

### Indoor Light Located Directly Above Is Sole Source



Backlighting causes this human figure to appear black.

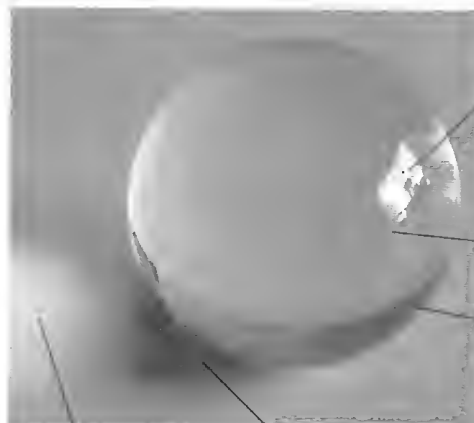
Table's edge

The table has nothing on it. The weak light source causes the table to appear grey.

The portion of the sphere touching the table appears black.

This fuzzy circular shadow indicates a weak light source.

### Natural Light from Window Is Sole Source (High Angle)



The window's shape is reflected.

Table's edge

The reflected ceiling appears to be a shadow.

The distant, weak light source produced this dim light reflection.

Sphere's shadow

## Chapter 2

# Letting the Props Narrate about the Character

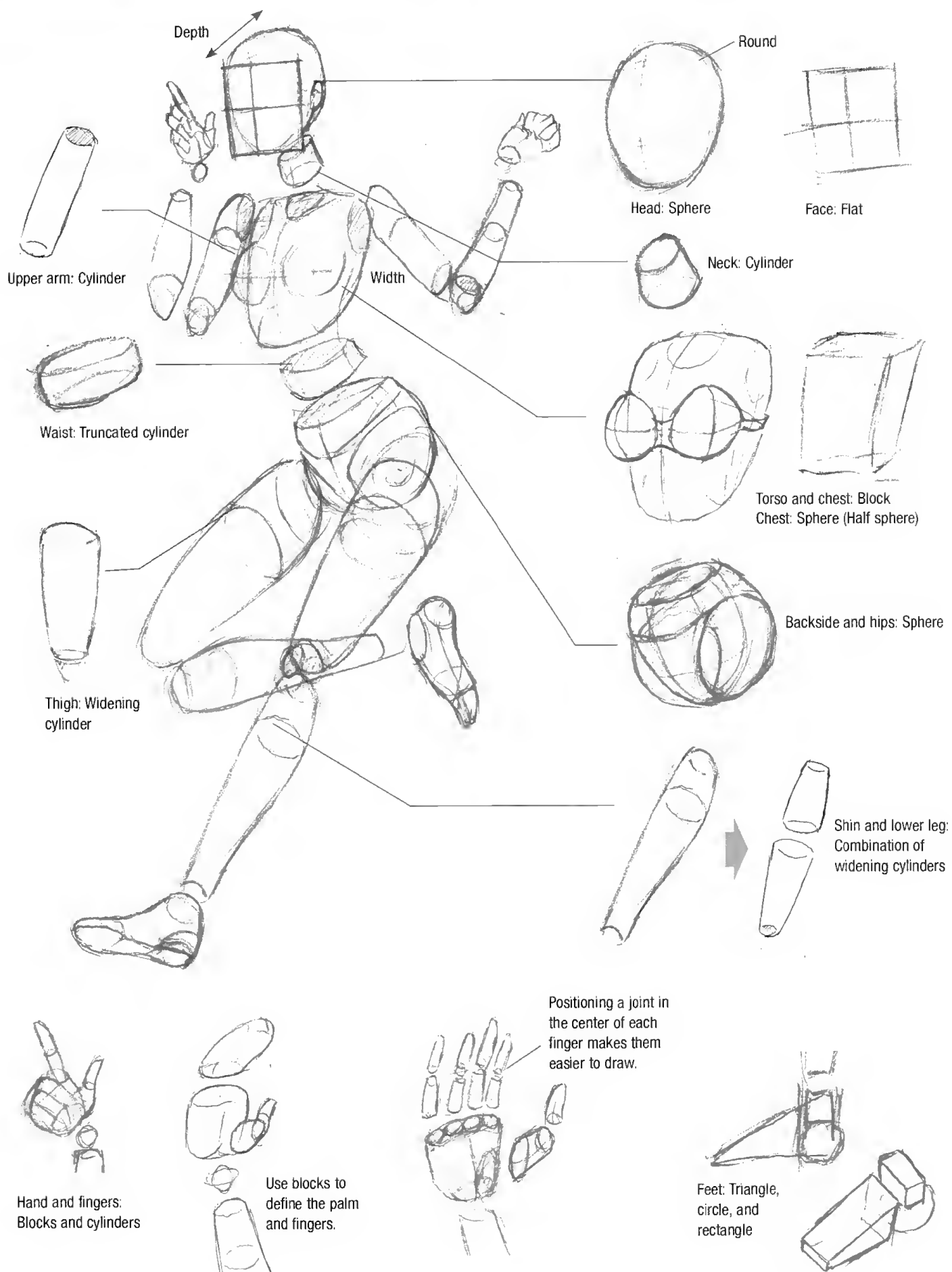


# What Is Meant by "Props Narrating about a Character"

A single pair of glasses can alter a character's impression. Shoes, bags, hats and other props all tell the reader more about a character's personality and lifestyle than words.



# Building a Character from Solid Shapes





# The Head

Capturing the depth and roundness of the head is vital to drawing glasses, hats, and other accessories worn on the face and head.

## Tips on Achieving Three-Dimensional Heads

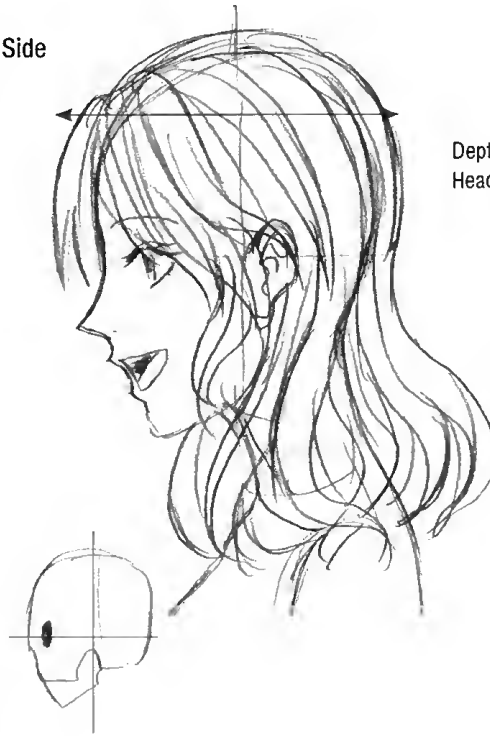
(1) Vertical and Horizontal Centerline: Use a Circle and X Layout

(2) Head Depth: Use the Face

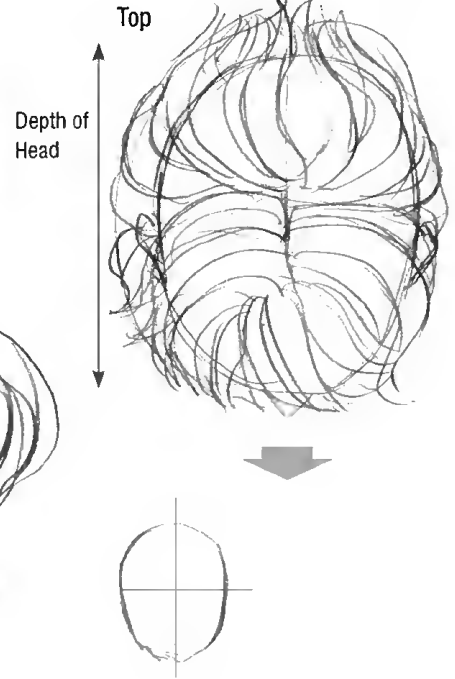
Front



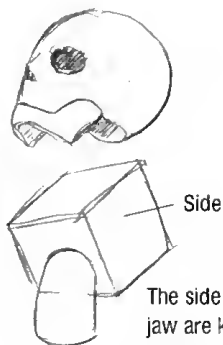
Side



Rear of Head



Low Angle View



The side and the underside of the jaw are key points in making the head appear three-dimensional.

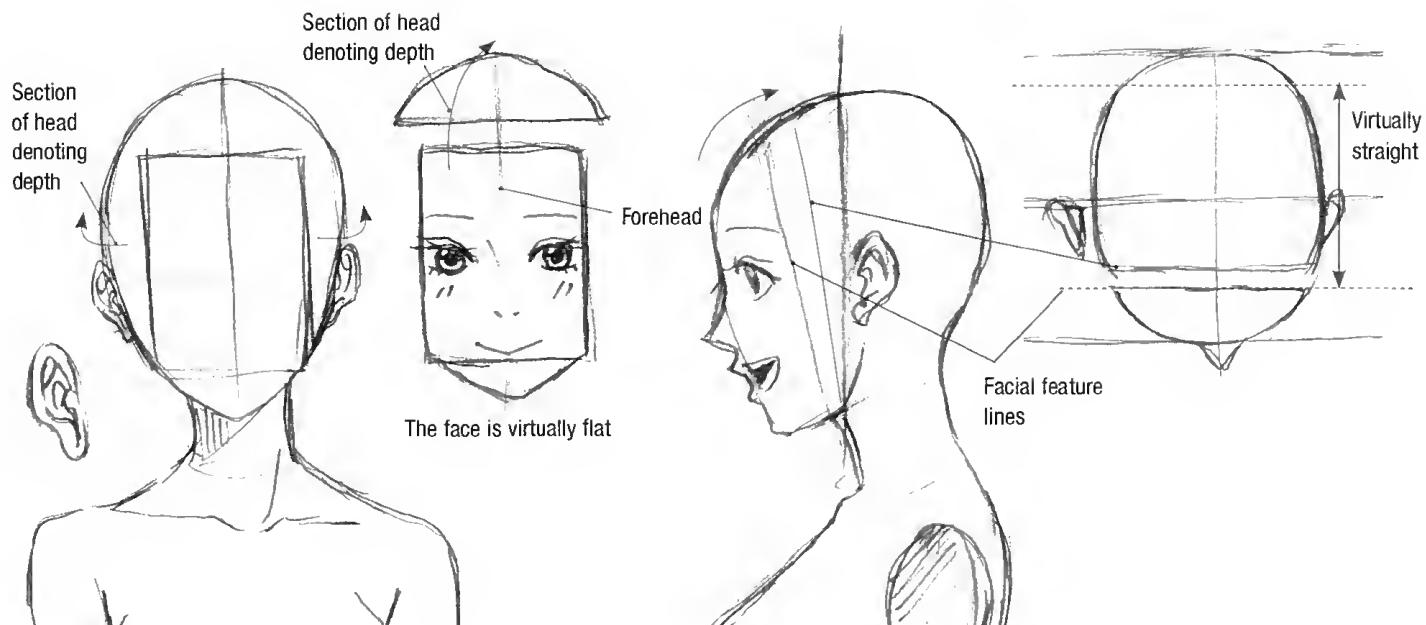
Rear, 3/4 View



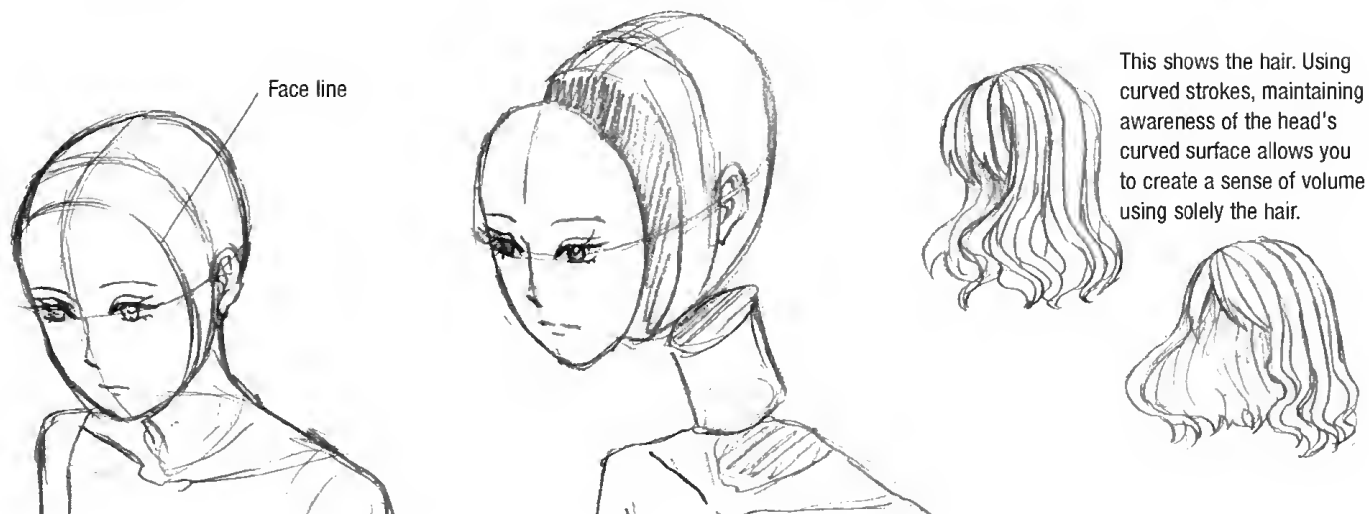
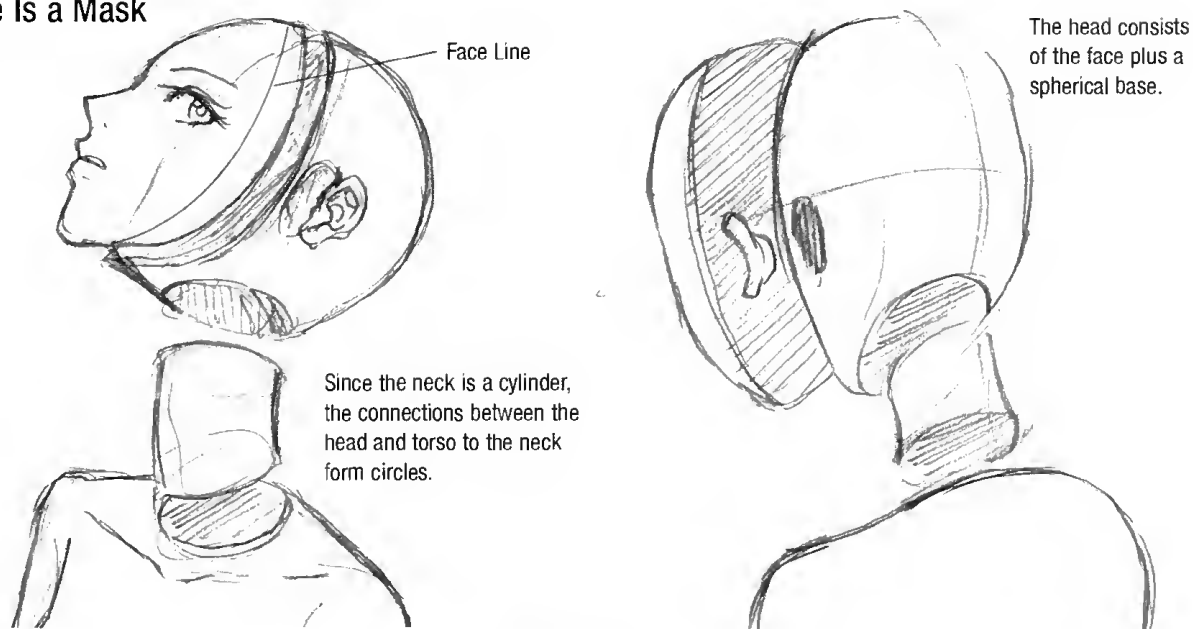
High Angle



## A Look at the Parts of the Face and Head

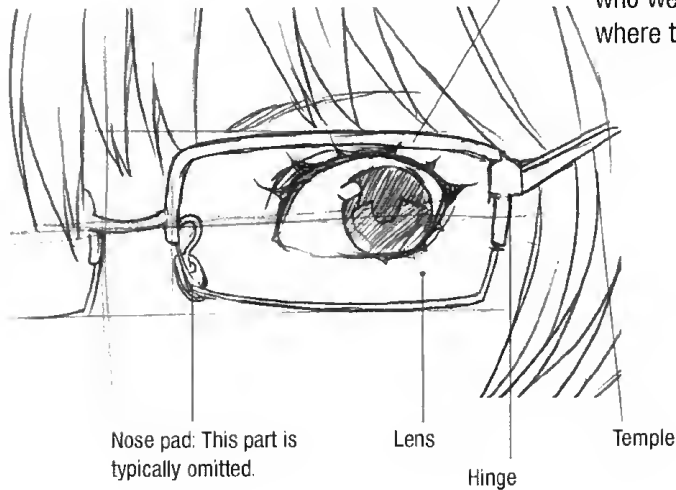


## The Face Is a Mask



## Eyeglasses

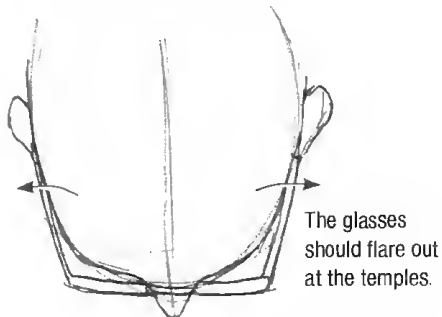
Frame (The front of the frame is called the "rim.")



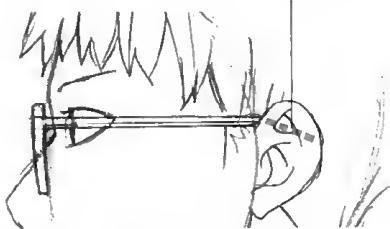
Glasses are such a popular accessory in *manga* that there is even a type of character known in Japanese as a "*meganekko*," which is a non-derogatory word referring to a young character who wears glasses. Make certain that you have established where the eyes and ears are positioned when drawing glasses.



- ◆ Tip 1: Be certain that the glasses proportionally match the face when composing them.



The temple tip slips around the ear.



The temple covers the eye.



The rims should be as wide as the face.

- ◆ Tip 2: Establish the angle of perspective.



The trick here is to draw the glasses as a standard solid rather than actually to follow the rules of perspective.

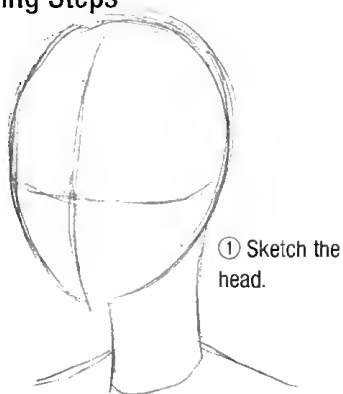


- ◆ Tip 3: Sketch the glasses as a shallow block.



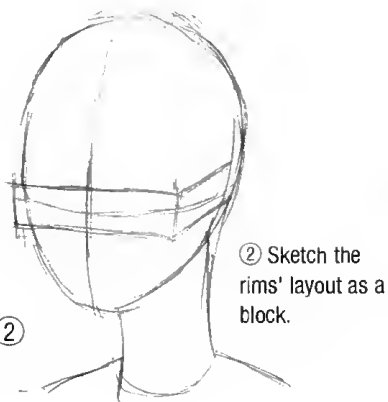
## Sketching Steps

①

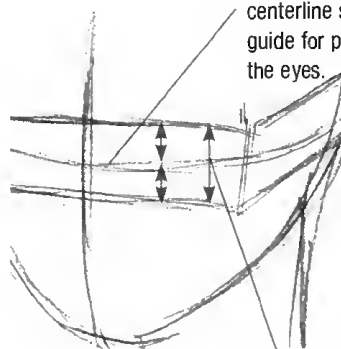


① Sketch the head.

②



② Sketch the rims' layout as a block.



The horizontal centerline serves as a guide for positioning the eyes.

Establish the rims' height according to what you pictured in your mind's eye.

③



③ Draw the glasses while adding in the eyes and nose.

④



④ Carefully add the details to finish. Make sure that the right and left sides of the rims and temples match in thickness.



Using the corner of an eraser, erase a narrow area following the rim's curve.

## Basic Points on Eyeglass Part Shapes

### How Glasses Are Worn



High bridge



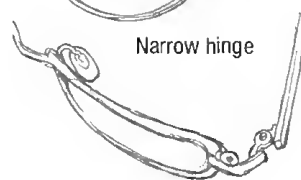
Low bridge



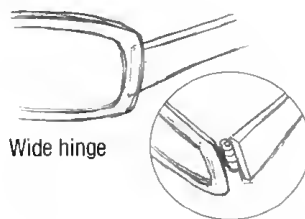
### • Hinge



Narrow hinge



Wide hinge



### • Rims



Rim attaches only to top of lens



Rimless



Rim attaches only to bottom of lens



Full rim (Rim surrounds lens)

\*Cellulose is a popular material for plastic frames; although, other materials are used as well. Cute, red frames are made of plastic.

## Shifting/Taking off Glasses

Lifting glasses:  
This pose could be used for *manga* or a magazine or book illustration.



When drawing the act of lifting glasses, make sure that the temple tips stay on the ears. This is a difficult feat actually to perform in real life.



When drawing a character removing glasses, use a high angle and have the character look down. The above drawing shows a low bridge, so the boy grasps the frame by the hinge.

## Adjusting Glasses

My glasses are intentionally drawn in perspective to preserve my expression.



The act of grasping the frames with the fingers is an affectation meant to intimidate. Be sure to make the hand big.



This character is pushing up her glasses with the inside of her fingertips. The act has a reserved air. Draw the fingers touching the frame. Making the hands smallish projects a feminine atmosphere.





The above could be used to suggest a character putting on glasses, removing them, or adjusting the glasses' position. The ring finger typically bends in conjunction with the middle finger. However, adjusting the point of view allows the artist to show movement.



This character is pushing up his glasses with his middle finger. While the act serves to adjust the glasses, placing the hand in front of the face functions to create an intimidating air or heightens the character's presence.

## Portraying Characters in Glasses (Eyeglasses Effects)



These glasses have oval lenses. The temples attach to the rims' bottoms, projecting a gentle impression. This look works well with *bishonen* (literally "beautiful boy") style characters.



These goggle-style frames have tall lenses. Frames like these typically come colored or are used as sunglasses. The eyes are obscured to people looking directly at the wearer, making this style suited to creating a suspicious atmosphere.



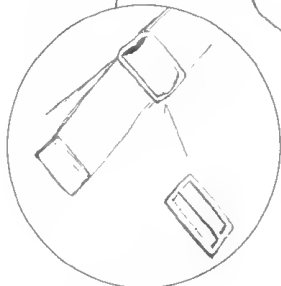
Rectangular lenses suggest an honest, upright character.



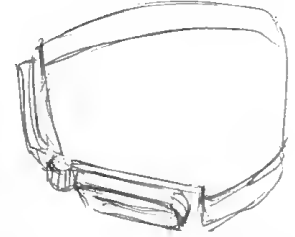
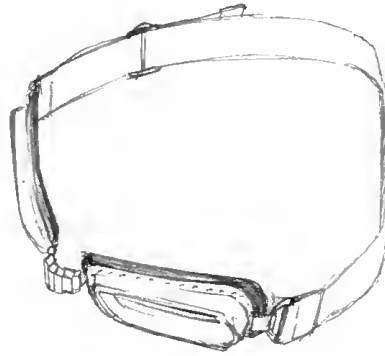
These are simply rendered, round frames. Project a character's personality by adding simple eyes for a regular character or omit the eyes to create a geek.

## Goggles

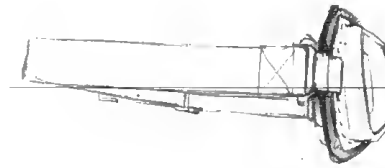
Goggles are an advanced application of glasses. Instead of flat lenses, draw boxy or tubular lenses onto a headband.



Strap buckle



The above shows a rough sketch capturing the shape. The depth and width of the front piece are generally established.



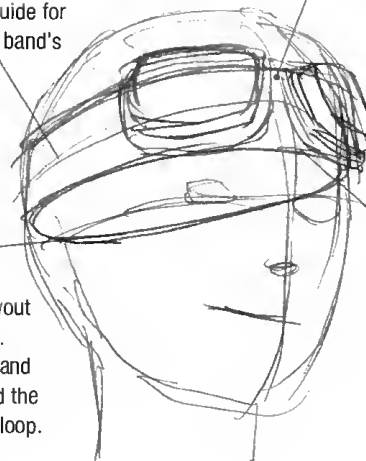
Study the front piece's depth, the band's width, and where it attaches (whether it attaches toward the front piece's center, top, or bottom).

This centerline functions as a guide for determining the band's placement.

Sketch a band to function as a layout guide for the front piece.

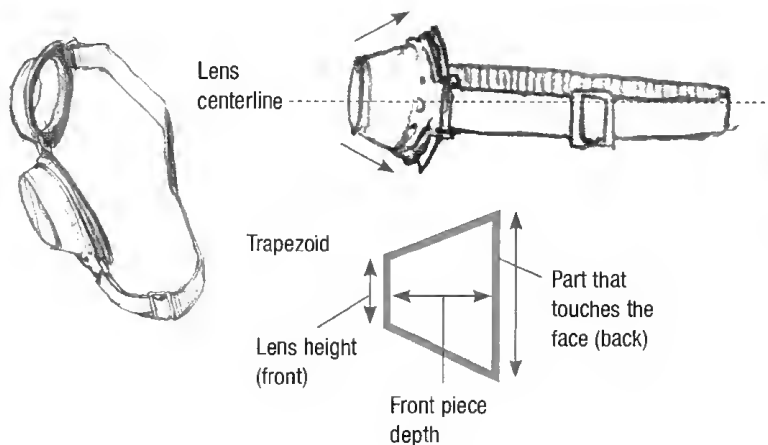
This shows a layout of the headband. Show the headband wrapping around the head, forming a loop.

This functions as a guide for aligning the lenses' lower ends.

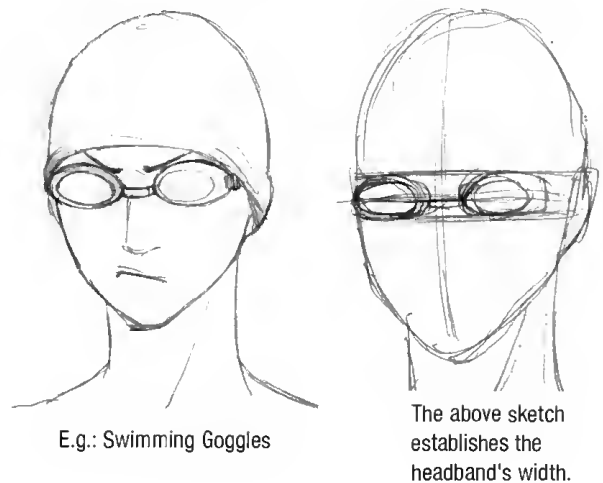


## Sketching Tips

### Capturing the Front Piece's Form



### Capturing the Lenses' Width

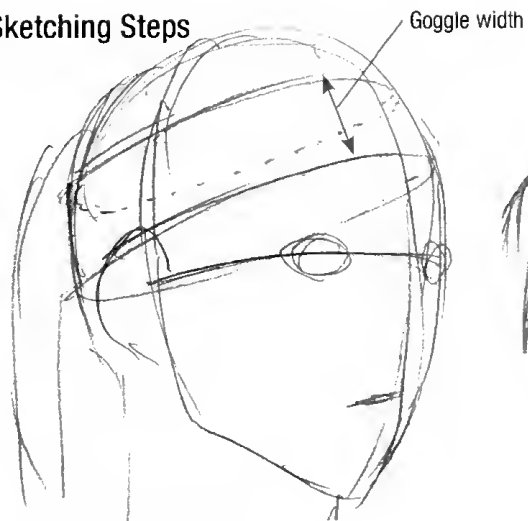


E.g.: Swimming Goggles

The above sketch establishes the headband's width.



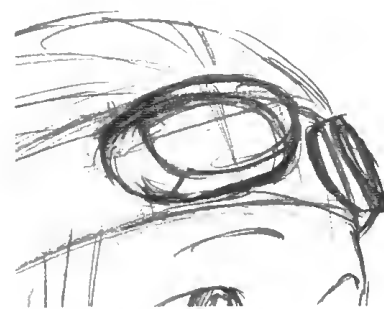
# Sketching Steps



① Sketch a headband-style layout establishing the goggles' width.



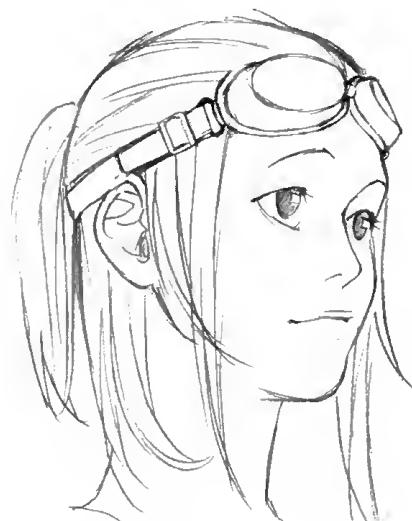
② Draw the headband's centerline.



③ Draw ovals for the lenses.



④ Draw the headband.



⑤ Final image



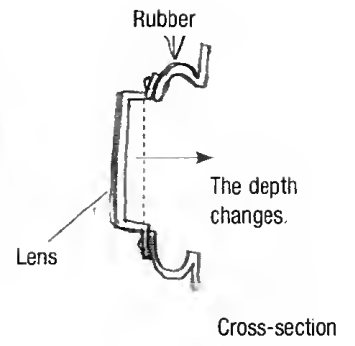
The same applies to lenses laying at a tilt or to round lenses.



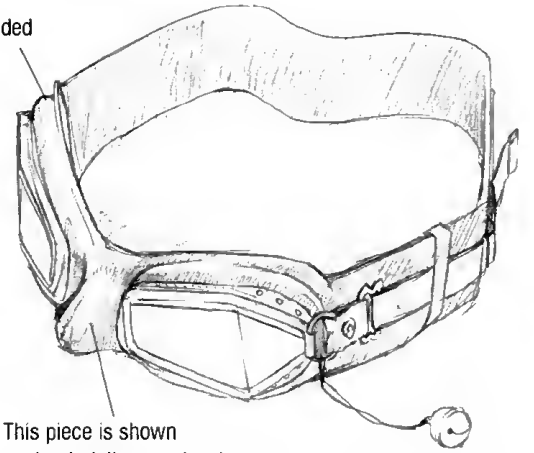
Round lenses







Rounded



This piece is shown contracted. It expands when worn.

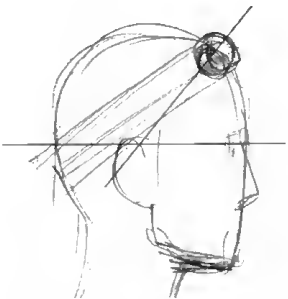
The bell is an optional accessory.



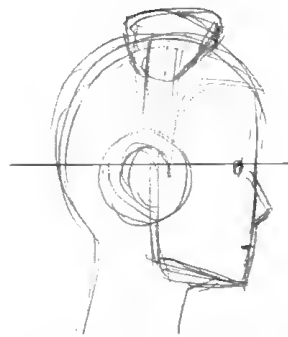
## Goggles as a Fashion Accessory



When worn at approximately 30°, the goggles just touch the eyebrows. The goggles lie close to the eyes, making it a practical way of wearing them.



When worn at approximately 45°, the goggles lie over the forehead. This is the most common way to fashionably wear goggles.



This character is wearing her goggles at approximately 60°. Rather than being practical or fashionable, an artist would choose this style of wearing goggles to reflect the character's individuality. This style also works effectively with magazine or book illustrations.



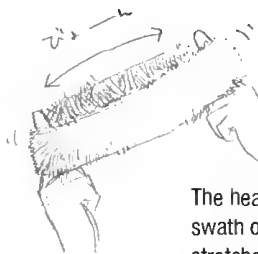
## Headbands and Other Headpieces: Wraparound Headpieces

These are fashion accessories that reflect the head's curved surface. These are rendered using curves that originate from ellipses.

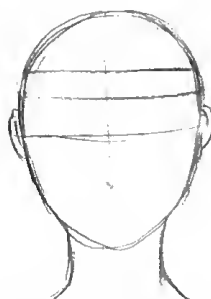
### Cloth Headbands



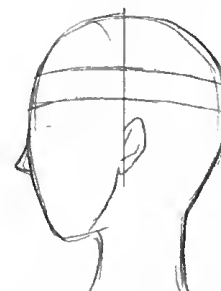
When drawing accessories for the head, be sure that you correctly position the head's crown (the head's top/center) and the ears.



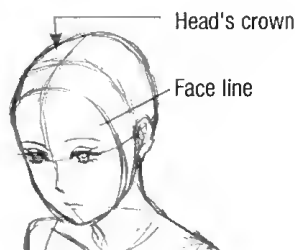
The headband is a swath of cloth that stretches and contracts.



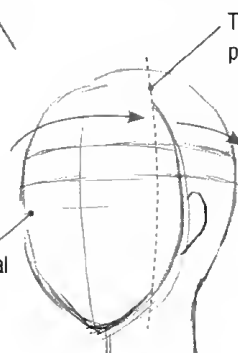
Front view: The headband takes a moderate downward curve.



Profile: The headband takes a moderate upward curve.

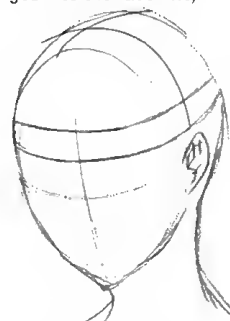


Head's horizontal centerline



3/4 view: Upward curve

The curve changes directions at this point (it changes into the face line)

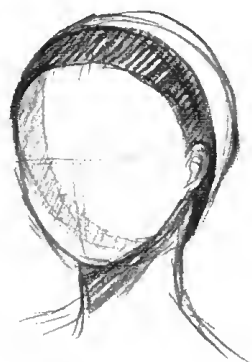


High angle: Downward curve



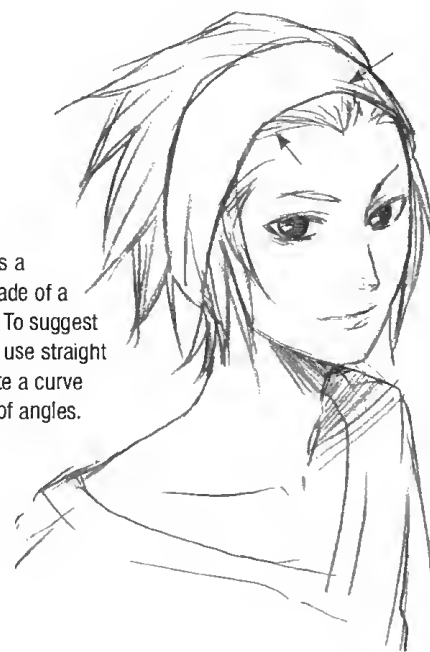
Low angle: Upward curve

### • Cloth Headbands Worn Vertically

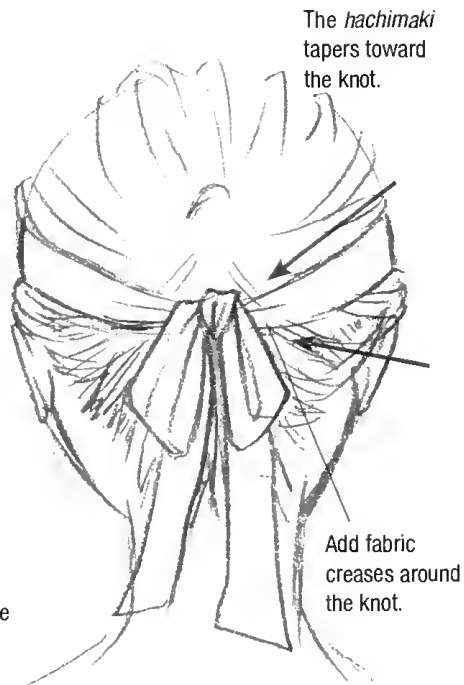
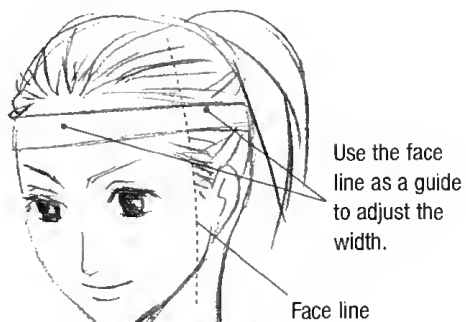
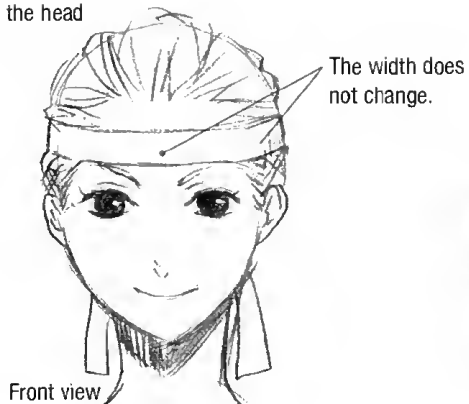


This shows a headband made of a supple fabric. The headband follows the head's curved surface.

To the right is a headband made of a stiffer fabric. To suggest a stiff fabric, use straight lines to create a curve constructed of angles.



**Hachimaki** (\*Narrow strip of cloth worn around the head and tied at the back)



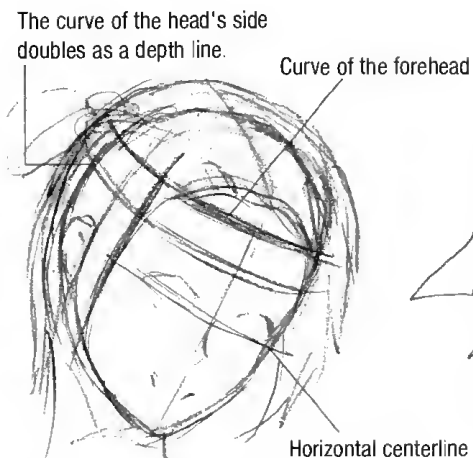
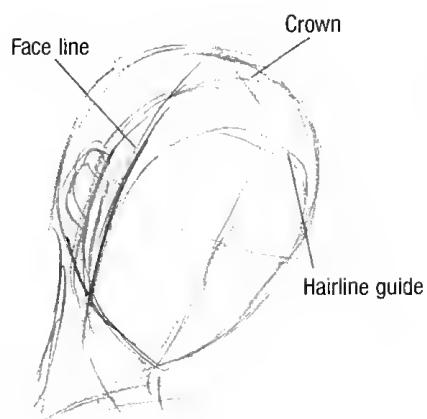
Perfect Profile View



Slightly Turned



# • Sketching Tips

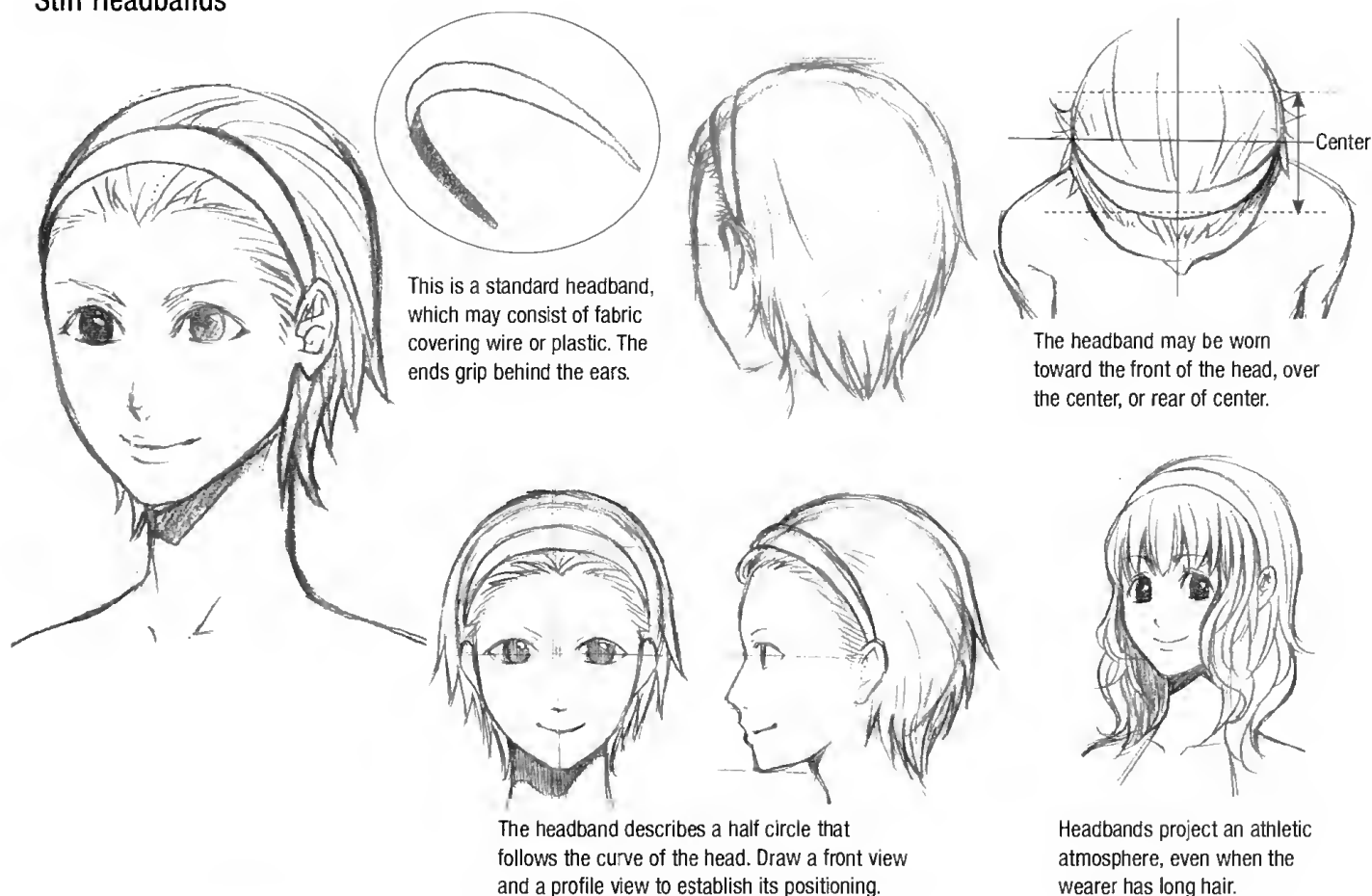


① After sketching the layout, add the face line.

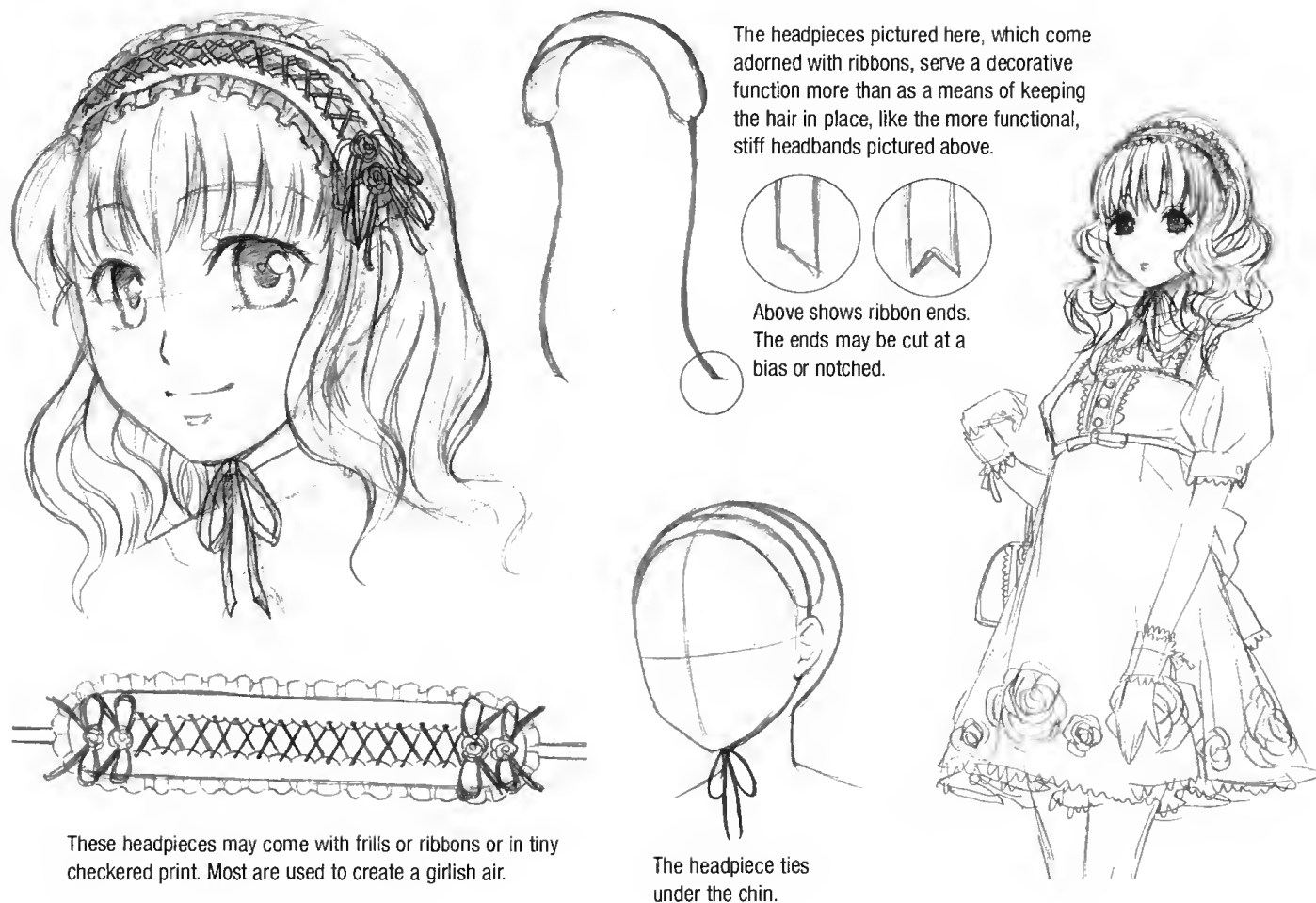
② Add the *hachimaki* after first establishing the volume of the hair. The curve of the forehead forms a gentle arc that lies virtually parallel to the horizontal centerline.

③ Add facial features, hair, and other details to finish.

## Stiff Headbands



## Headpieces

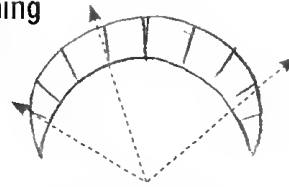


## Maid Headpieces



The maid headpiece has cloth ruffles; although, there are versions like the ribbon headpieces pictured on the previous page.

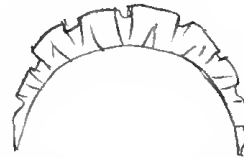
### Sketching Steps



① Use a radiating form for the layout, making the lines equidistant.



② Use a wavy line for the top contour.

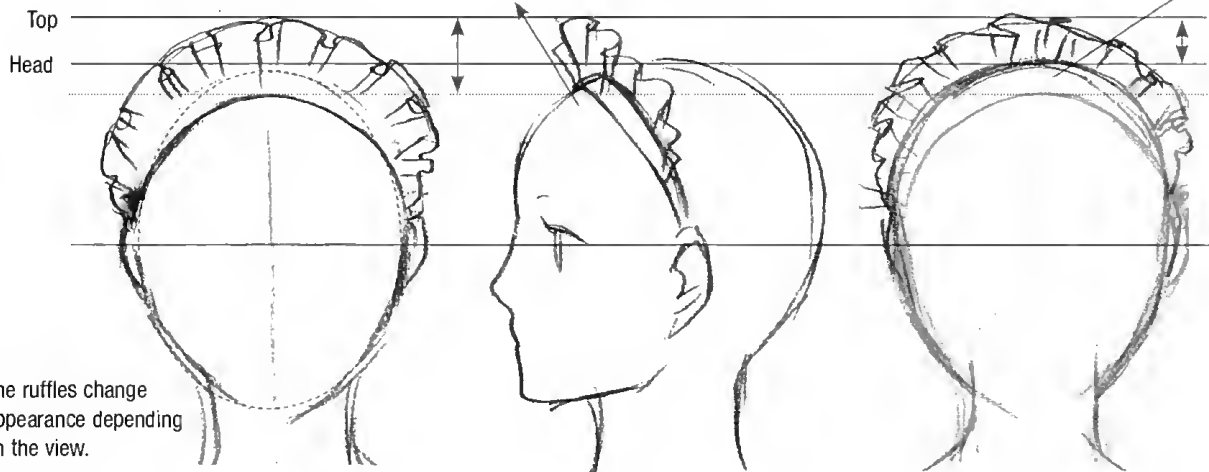


③ Add V's (both right side up and upside down) to finish.



The ruffles stand at a tilt.

Portion covered by the head



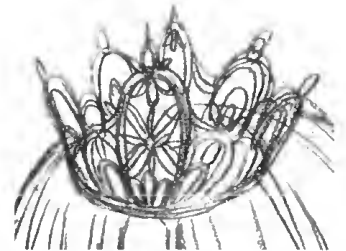
The ruffles change appearance depending on the view.

## Headband with Kitty Cat Ears



This headband has animal ears (in this case, kitty cat ears). These are typically used as a costume. Versions with headbands that lie flat on the head like those shown on the previous page also exist.

## Crowns and Tiaras



Crowns are placed on the head. This functional characteristic causes them to be categorized with hats. However, since crowns are not an item we encounter in our daily lives, they are more a costume item, like the kitty cat ears also shown. We might wear a crown or a tiara to a party or wedding.

# Hats

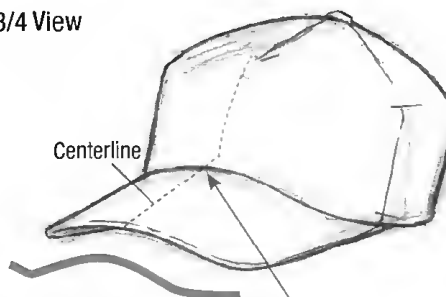
## Baseball Caps

Hats comprise a crown and a brim.

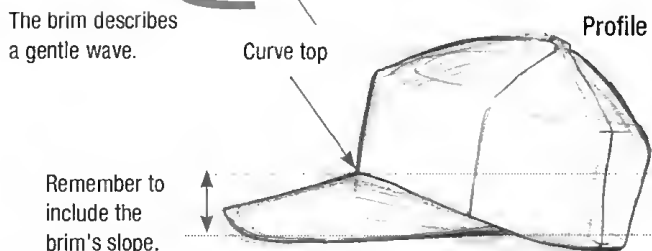


Hats are a wonderful accessory making a character look cute. They enable the artist to indicate that a character is stepping out using solely the costume. Maintain awareness of the head's shape when drawing hats.

### 3/4 View



### Profile View



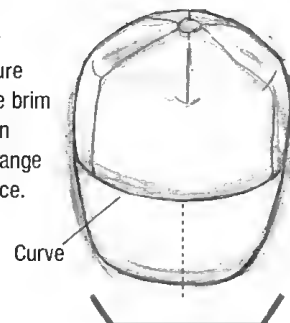
Note how the curves change appearance depending on the angle of perspective.

### Directly Above



### Moderate High Angle

Note how the juncture where the brim and crown attach change appearance.



## Common Hats



School cap



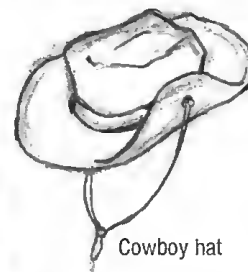
Newsboy cap



Straw hat



Knit cap



Cowboy hat



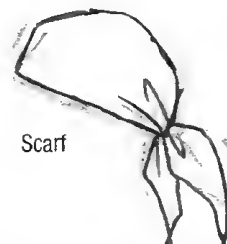
Baseball cap



Hunting cap



Floppy sun hat



Scarf

This is a scarf worn wrapped around the head. While it is not a hat, it changes the appearance of the wearer like a hat does.



Sun visor



Beret



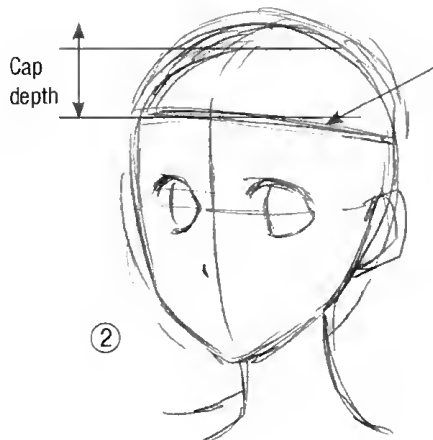
## Sketching Steps

①

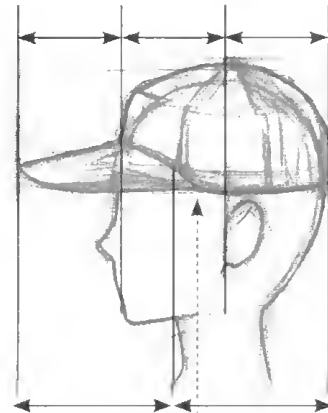


Sketch a layout of the character.

②



Draw a line that establishes the cap's depth. Draw the cap's crown without a brim.



The brim joins with the crown slightly rear of center.

Centerline

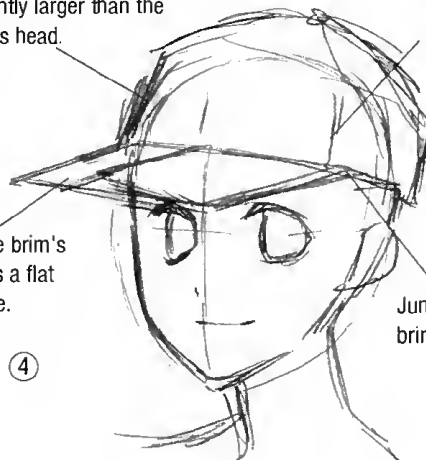
③



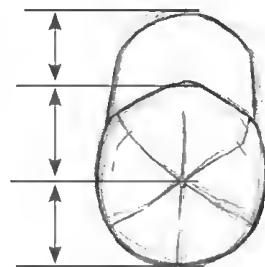
Sketch the crown's layout, making it just slightly larger than the character's head.

Draw the brim's layout as a flat rectangle.

④



Draw the seam slightly closer to center than where the brim attaches to the crown.



The crown comprises six panels connected by seams.

Draw a line extending from the centerline into the direction that the character faces. This line will form the basis of the brim. (This applies when the character wears the cap straight on his or her head.)

Centerline

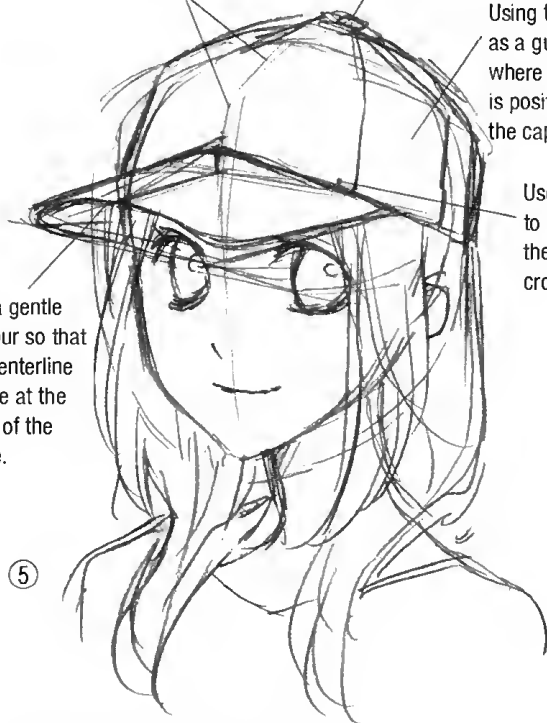
Crown of the head

Using the centerline as a guide, establish where the head's crown is positioned and adjust the cap's shape.

Use an inverted V to describe where the cap's brim and crown connect.

Use a gentle contour so that the centerline will lie at the crest of the curve.

⑤



Flesh out the character and the cap.

⑥



Clean up the lines to finish.



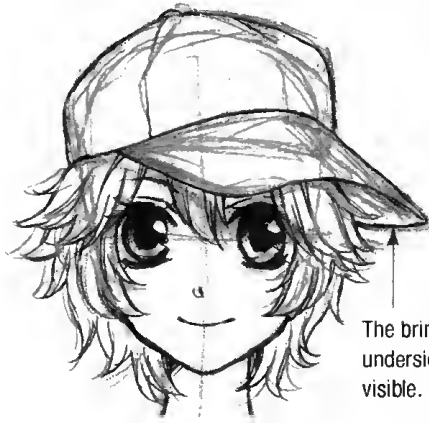
## Assorted Ways to Wear a Cap

Be sure to capture accurately how the brim changes appearance.

### Front View



The above shows a cap worn straight.



This shows a cap worn at a downward tilt.

The brim's underside is visible.



This shows a cap worn at an upward tilt.

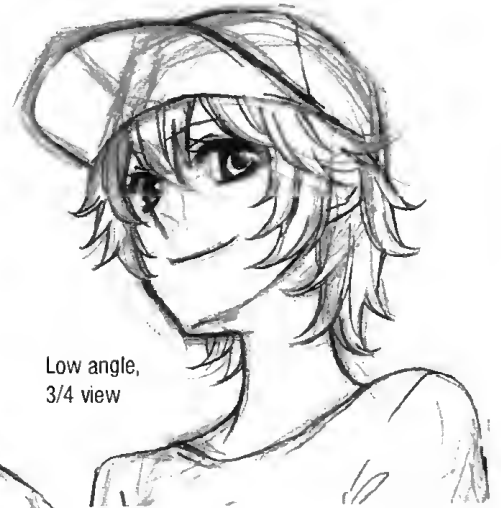
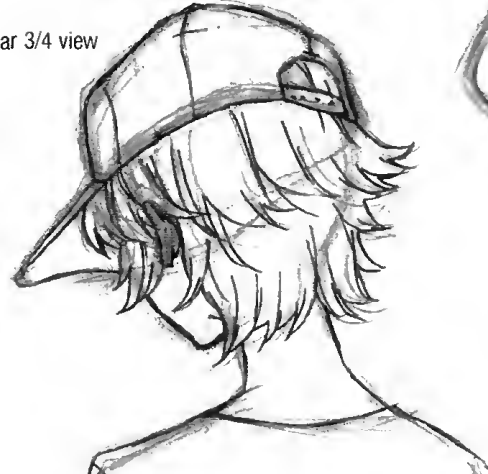
Only the brim's underside is visible.

### Worn Straight

#### Profile view



#### Rear 3/4 view



Low angle, 3/4 view

### Worn with the Brim in the Back

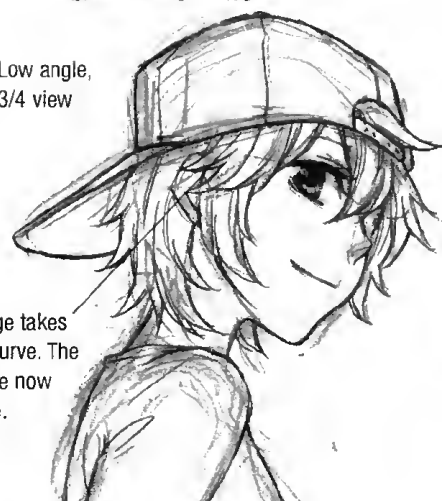
Moderate high angle



#### Profile view



Low angle, 3/4 view



This bottom edge takes on an upward curve. The brim's underside now becomes visible.



Moderate high angle, front view

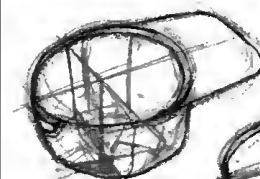
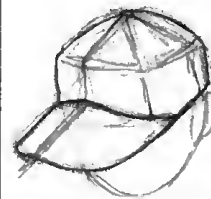
### Ref.: Bend in the Brim



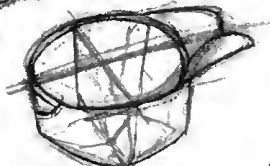
Standard bend in brim



Brim with more dramatic bend



The brim tapers narrows toward its end.



## Newsboy Cap

This is an advanced application of a cap.



Front view



Profile view



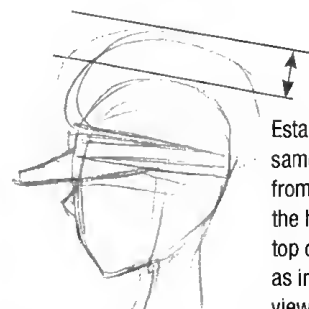
Think of the cap's crown as a pin cushion and attach the brim.

\*The newsboy cap generally sells well. Cotton is worn during the summer and wool during the winter.

Layout of the crown



Use a W-shaped wave for the brim's front.

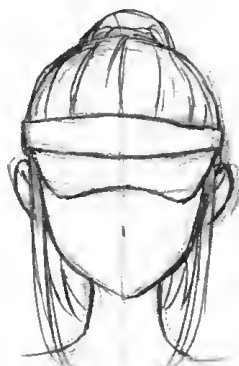


Establish the same distance from the top of the head to the top of the cap as in the front view.

The charm of the cap is its oversized fit. Drawing this contour so that it slightly covers the bottom edge is an effective way to create this look.

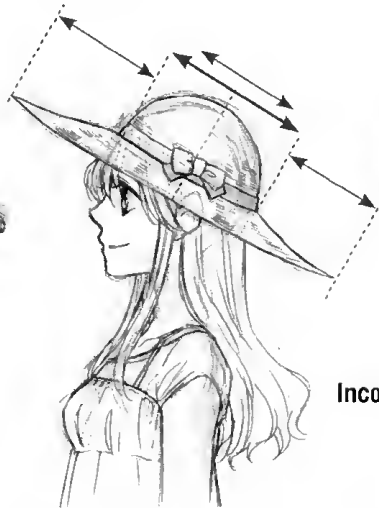
## Sun Visors

Draw sun visors as headbands with brims.

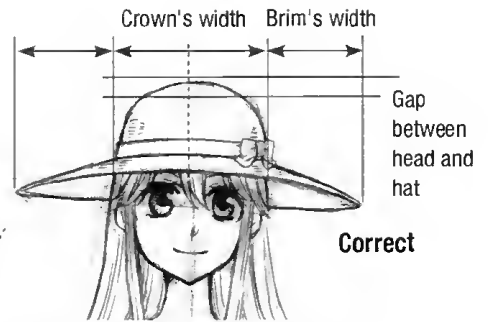


## Straw and Wide-brimmed Hats

Draw a large circle (ellipse) constructed around (the roundness of) head.



The brim is approximately the same length from front to back and right to left.



**Correct**

The hat should be worn low so that it just covers the eyebrows.

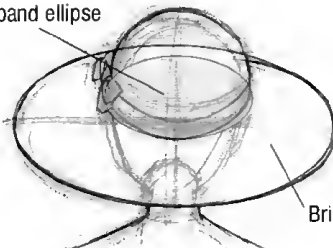
**Incorrect**



The hat appears unnatural if it floats above the head. It makes the head look too big.

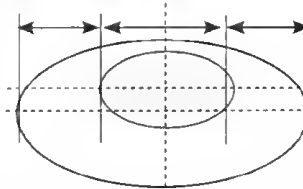


Hatband ellipse



Brim ellipse

When showing the hat worn at an angle, draw the ellipses forming the hatband and the brim so that their centerlines do not align.



The vertical centerline remains unchanged.

Hatband ellipse centerline  
Brim ellipse centerline



The brim's ellipse and the hatband's ellipse lie at the same angle. Only their sizes are different.

Brim ellipse

Hatband ellipse

Both ellipses lie at a 30° angle.



Hatching using curved lines that follow the arc of the ellipse create the look of straw.



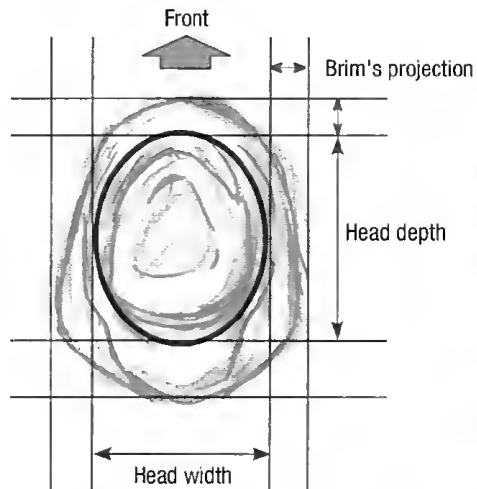
Sketch the face's horizontal centerline and layouts of the eyes to achieve the correct look of the brim's ellipse.



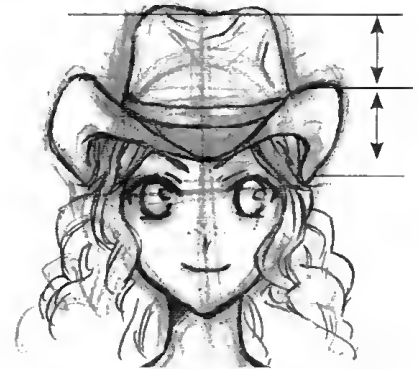
Straw is a soft, natural material, so remember to create a flexible shape.

## Cowboy Hats

Cowboy hat brims curl up at both sides, and the crown has a trapezoidal form.



This shows the brim tilted upward in front.



This shows the brim worn level.

Establish whether or not the brim widens and the extent to which the sides curl up (in this case, to about half the height of the crown).



Brim tilted upward in front



Brim tilted downward in front



Brim worn level



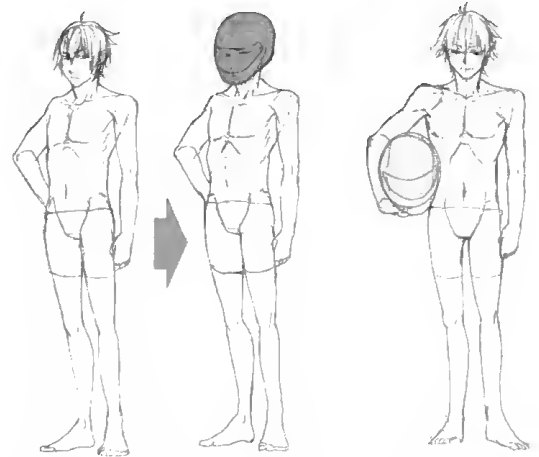
Brim worn level from a high angle



Brim worn level from a low angle

## Helmets

The helmet's silhouette reflects that roundness of the head. Some helmets, called "full-face helmets," cover the entire head, while others, called "half helmets," cover only a portion.



When donned, a helmet makes the wearer's head look oversized.

Visors (shield) come in flip-up and snap-on versions. Tinted visors are also available.

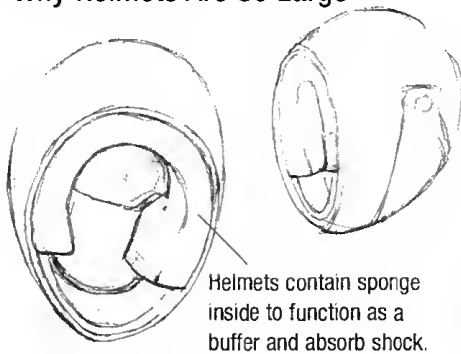


### Guide for Determining the Sizes of the Helmet and Head



Sketch the helmet's outline so that it follows the head's contours. Make the helmet two sizes larger than the head.

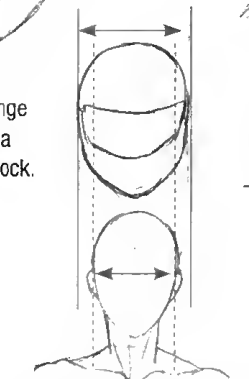
### Why Helmets Are So Large



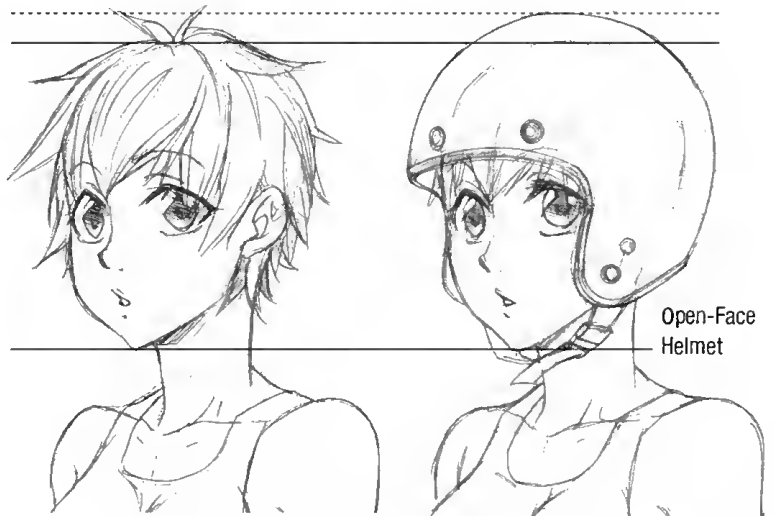
Helmets contain sponge inside to function as a buffer and absorb shock.

#### Incorrect

Incorrect example: The helmet is too small.



Always draw the head first before drawing the helmet.



Open-Face Helmet

The flyaway hair locks function as guides for the helmet's layout.



## Using a Circle and Curve Template to Produce a Clean Sketch

Helmets are assemblages of gentle curves. If you intend to do an accurate close-up of a helmet, use a curve or large ellipse template.



In *manga*, artists generally use technical pens instead of dip nib pens.

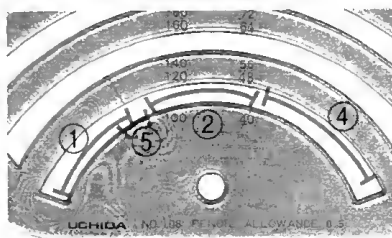


Curve template A

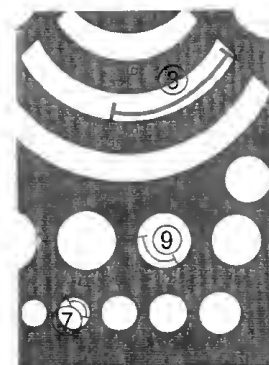
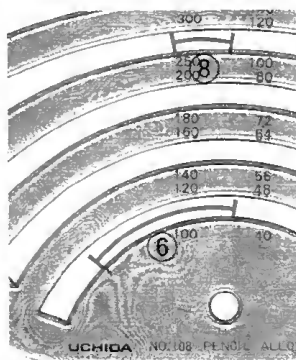
These templates contain curves of incrementally different curvatures. These may also be called "large ellipse" templates.



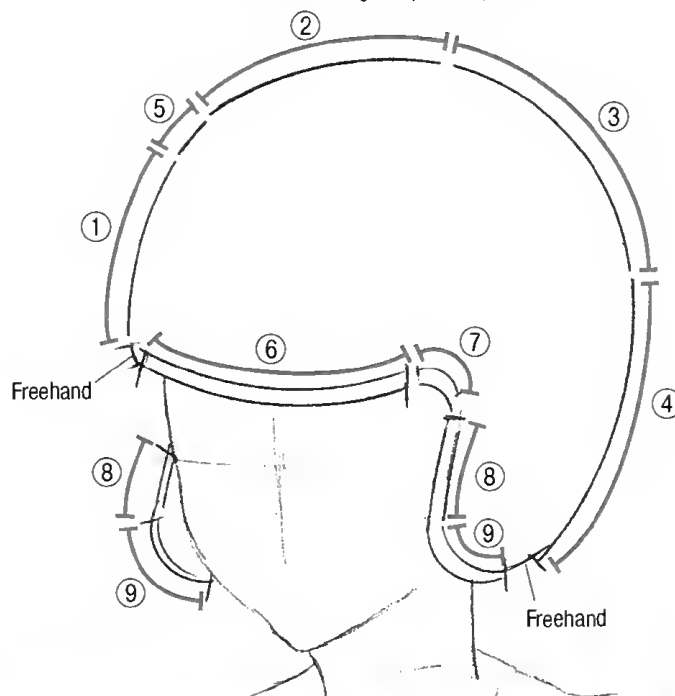
Curve and circle template B



Curve template A

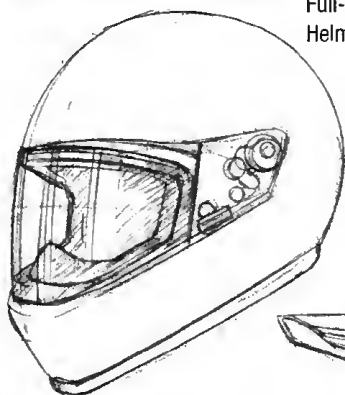


Curve and circle template B

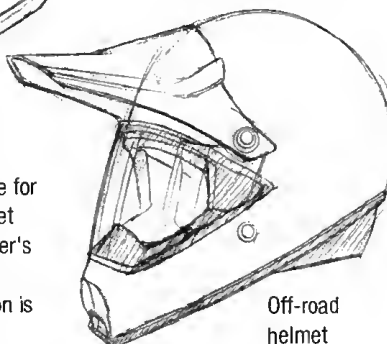


## Common Helmets

Full-Face Helmets

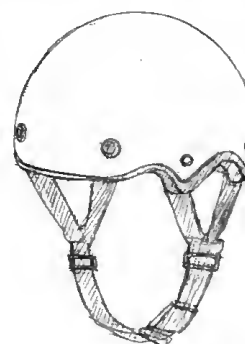


Full-face and off-road helmets include coverage for the chin. When the helmet is donned, only the wearer's eyes are visible, and the wearer's facial expression is obscured.

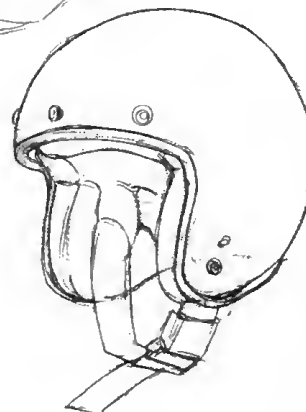


Off-road helmet

Modular helmet (This includes a flip-up visor.)



Shorty helmet: These are typically worn with 50cc scooters and mopeds or tandem bicycles.



Open-face helmet: (This version comes with a removable visor or without a visor.) Unlike full-face helmets, these have no chin coverage, allowing view of the wearer's facial expression.

# Headphones

Think of headphones as a headband with hamburgers attached.



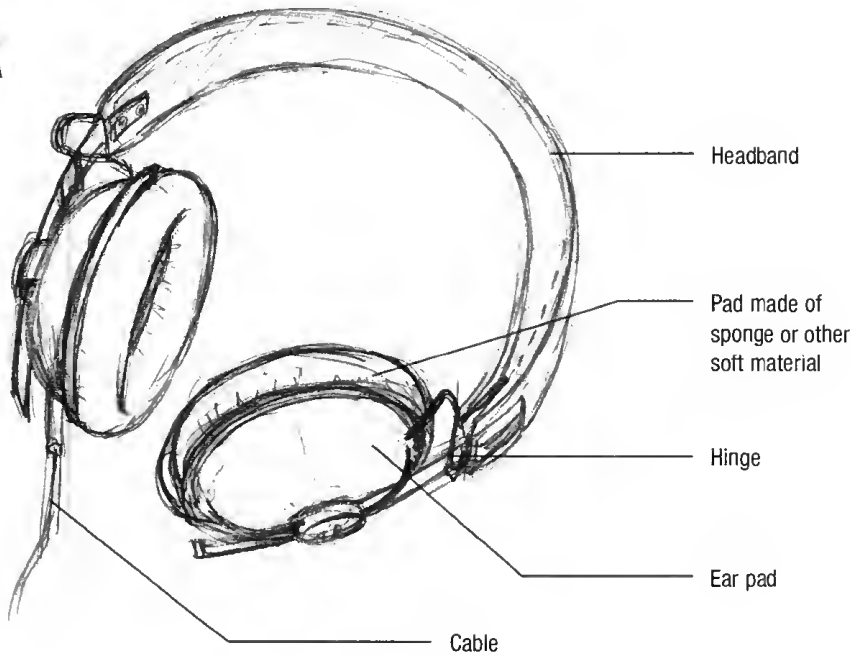
The hamburger-shaped ellipses are ear pads.

Headphones include a headpiece called a "headband" that is reminiscent of a fashion headband.

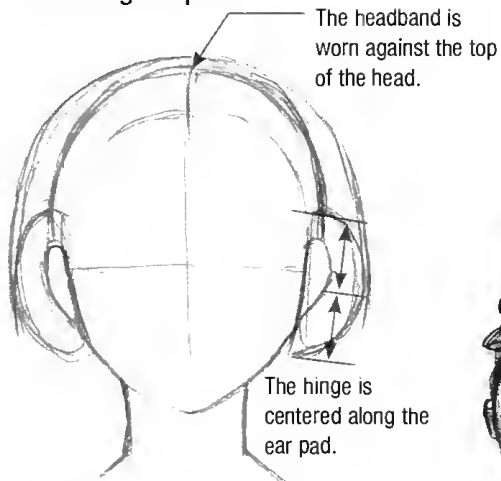


Below shows a finished headphones sketch.

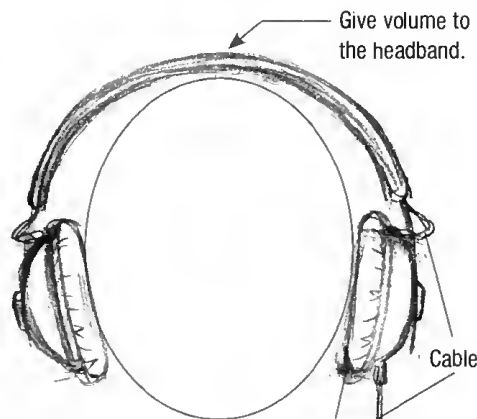
## Headphones and Parts



## Sketching Steps



① Sketch the figure's head plus the headphones.



② Clean up the shapes and add the details.

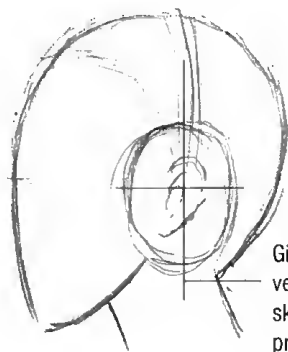
Some ear pads have wrinkles in the pad portion.



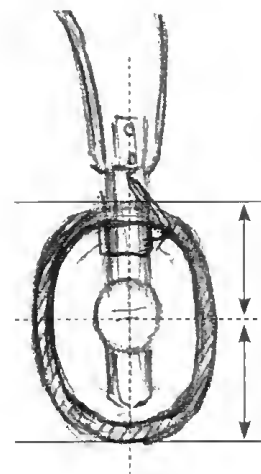
③ Final Image

## Sketching Tip: Draw the Ear and Then an Ellipse Covering the Ear

### Profile View



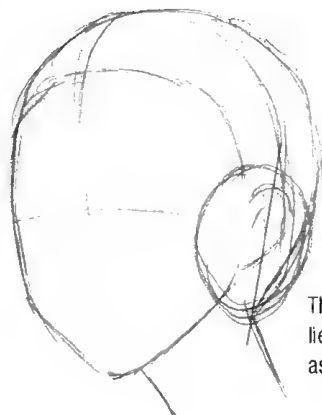
Give the ear pad a vertical centerline when sketching the figure in profile.



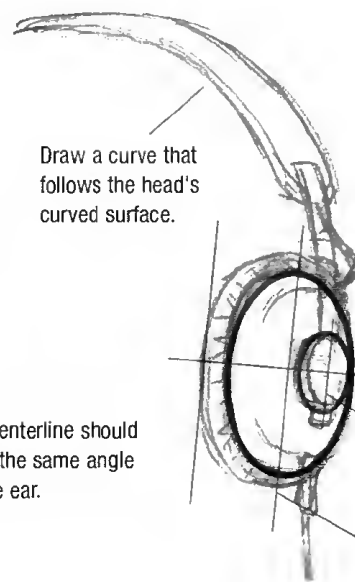
### 3/4 View



When drawing the figure in 3/4 view, shift the ellipse's centerline.



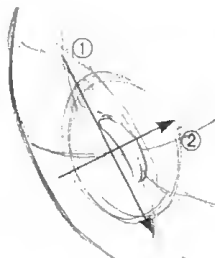
The centerline should lie at the same angle as the ear.



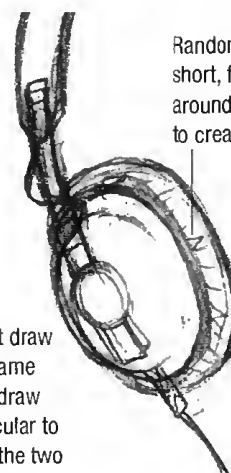
This is the centerline of the ellipse for where the hinge connects to the ear pad cup.

Ear pad centerline

### Rear 3/4 View, Moderate High Angle



For the centerlines, first draw vertical line ① at the same angle as the ear. Next, draw centerline ② perpendicular to vertical line ① so that the two lines intersect.



Randomly disperse short, fine strokes around the ear pad to create wrinkles.



## Removing Headphones and Hanging Headphones around the Neck

This character holds the headphones in her hands as she removes them.



The headphones are shifted behind the head. Be certain that you draw the neck with volume.



The headphones are pulled apart to take them off.

This character has a headphone set hanging around her neck.  
Front view



### Sketching Steps



① Sketch the headphones as slightly wider than a fashion headband.



② Attach hamburgers to each side.



Profile view



The headband describes an ellipse as it wraps around the neck.



## Designer Headphones

Some headphones are not merely functional but also fashionable.



These have unusually shaped ear pads.



Here we see earmuffs.



Some headphones display logos or other decorative artwork.

## Headsets

These are headphones and microphones that come attached as a single set.

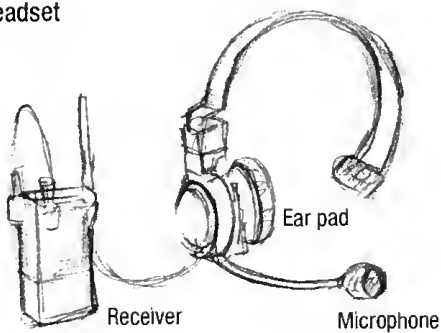


Operator



Entertainers also wear headsets.

## Headset



Receiver

Ear pad

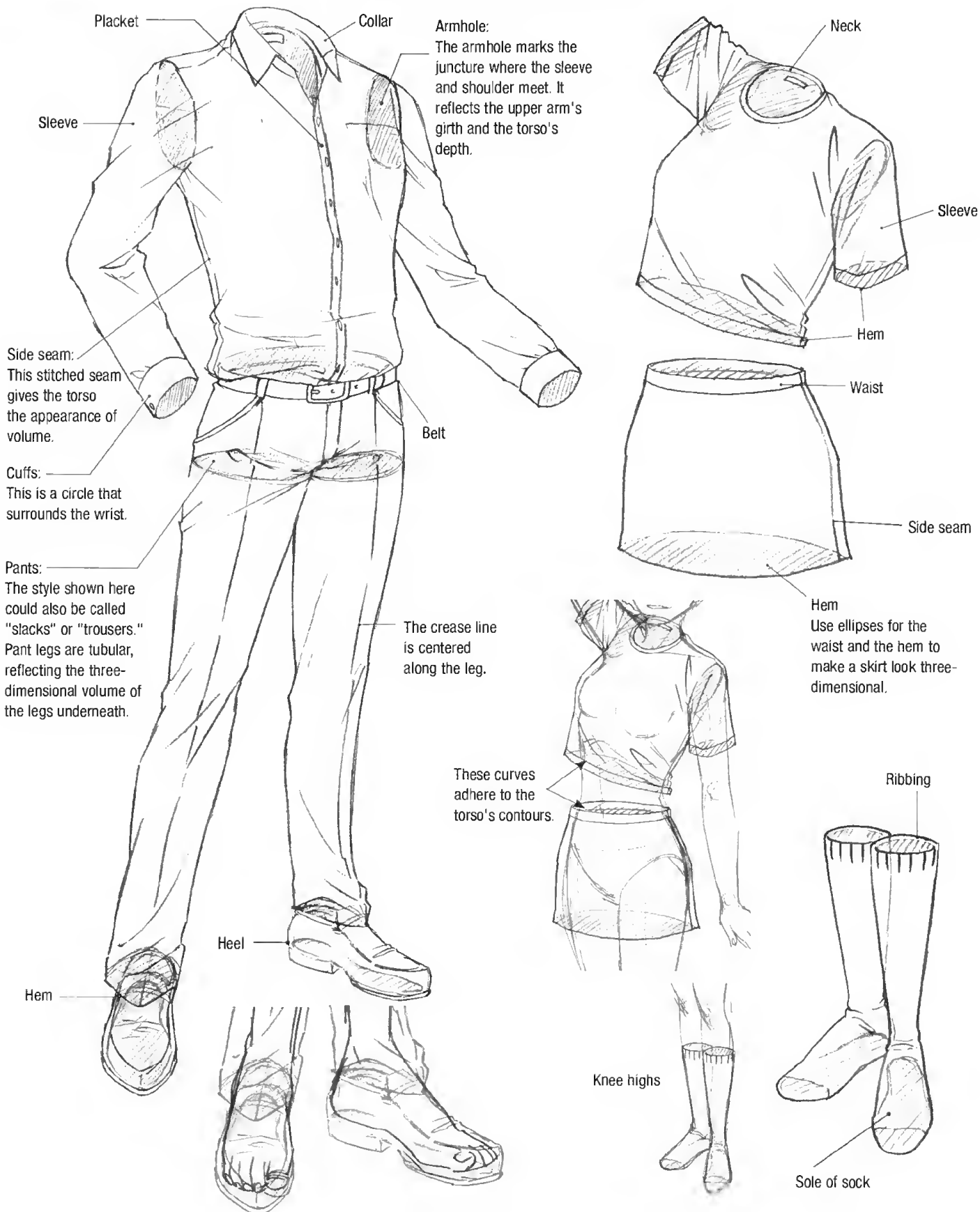
Microphone

# Props That Tell about the Arms, Legs, and Body

## The Basics of Clothing

Clothing is designed to envelope the body. This section discusses how the sleeves, neck holes, and other areas from which body parts protrude are circular in form.

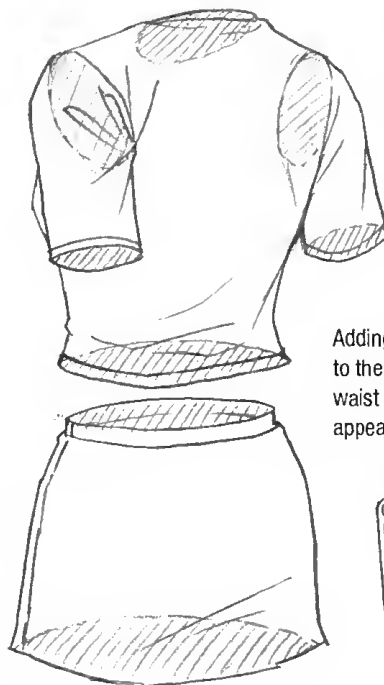
When using a prop or article of clothing to tell a story about a character, start by sketching the torso and limbs as three-dimensional cylinders.



## Clothing Is a Second "Skin"



Sketch the torso and draw the clothing around it, making the clothing just slightly larger than the torso.



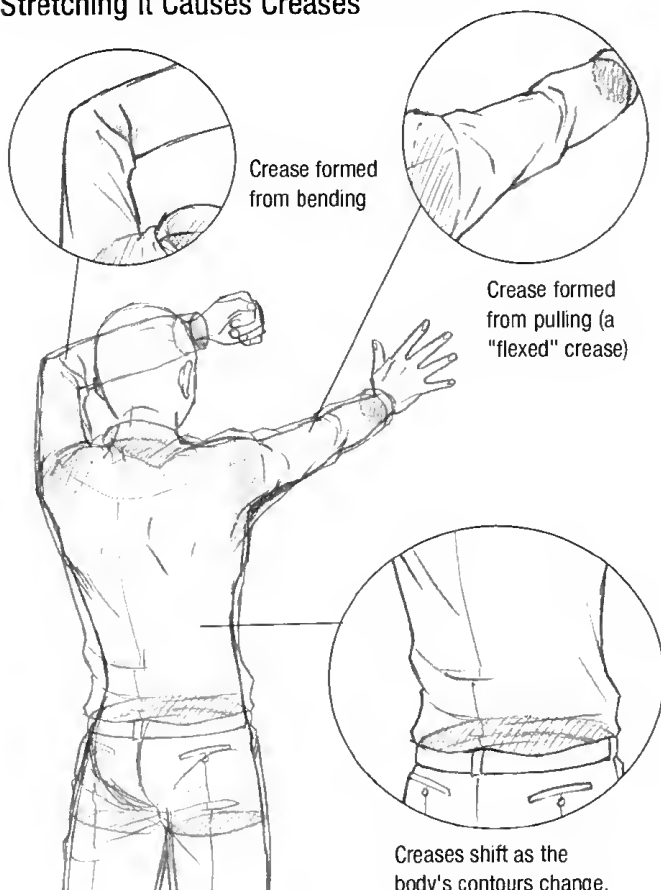
Adding diagonal hatching to the ellipses forming the waist and hem makes a skirt appear three-dimensional.



The most basic of clothing basics is a wrapped piece of cloth. Even merely wrapping a cloth around the body causes the fabric to form a cylindrical solid.



## Since Clothing Is a "Skin," Bending or Stretching It Causes Creases



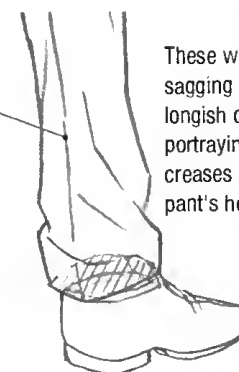
Crease formed from bending

Crease formed from pulling (a "flexed" crease)

Creases shift as the body's contours change.



Creases



These wrinkles reflect sagging fabric. Opt for longish curves when portraying wrinkles and creases around the pant's hemline.



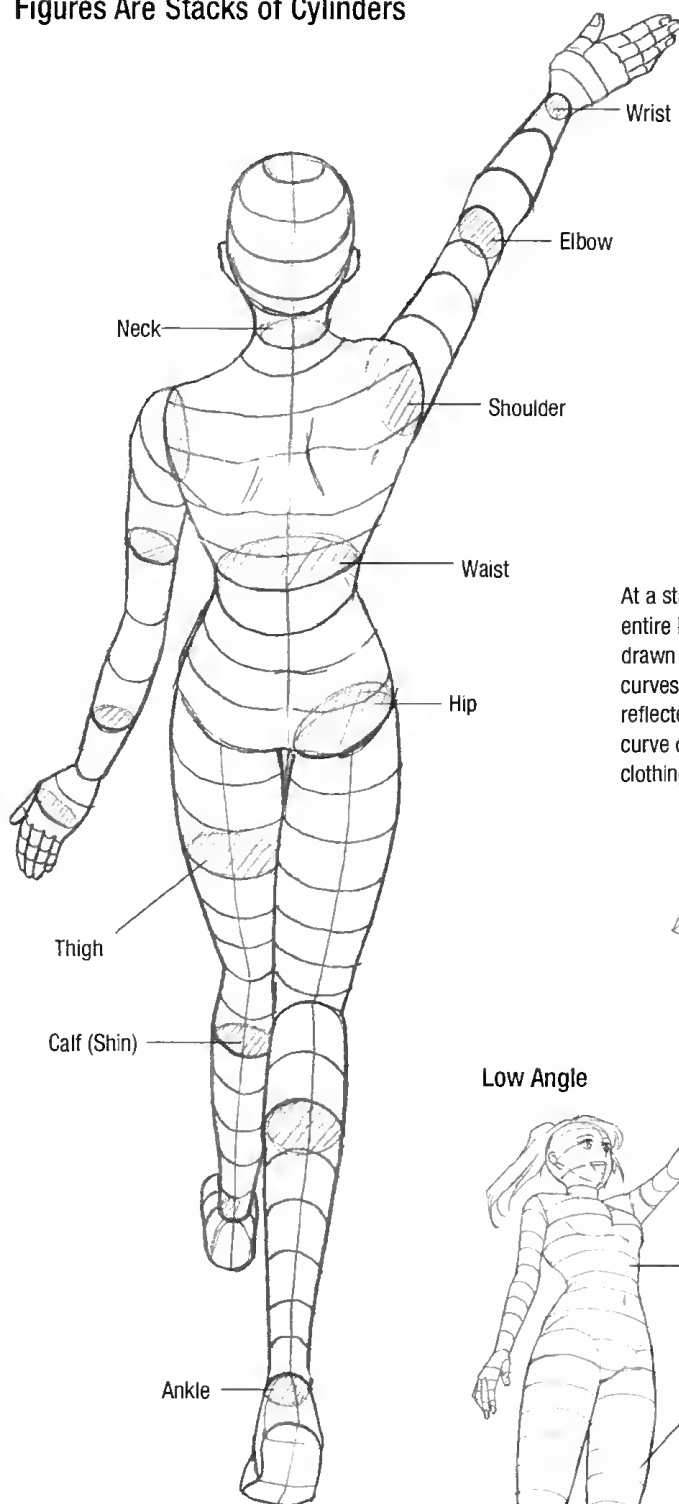
The front and rear creases double as centerlines.



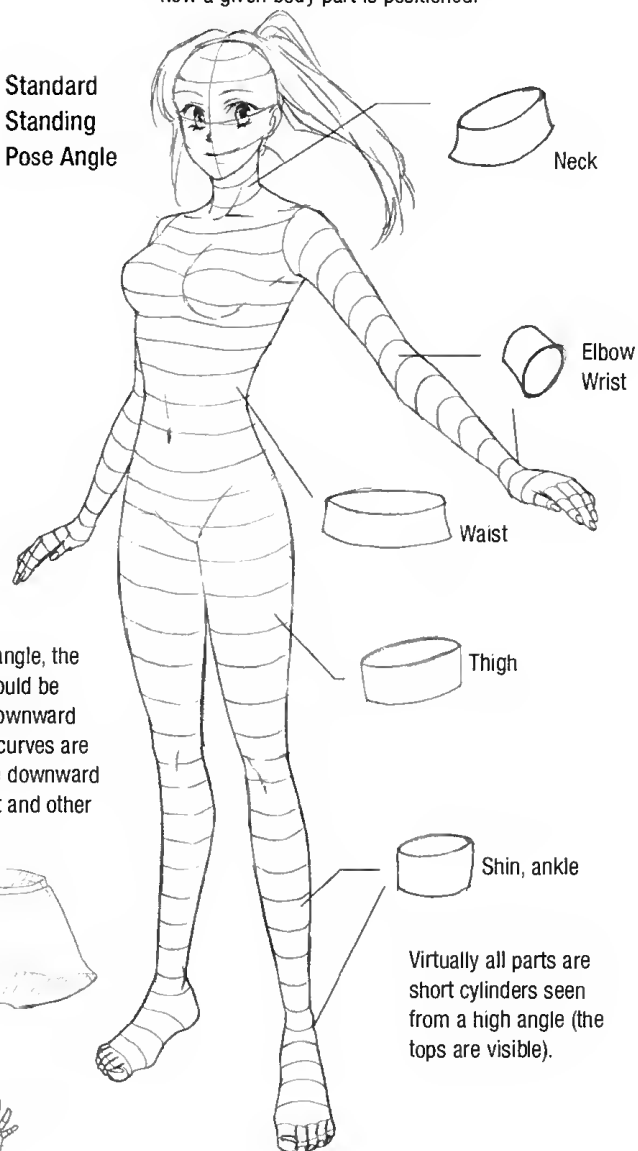
# Learning How to Draw the Human Figure from Your Mummy

Sketch a figure with stripes across his or her body, as if the figure were a mummy. The direction that a curve takes (upward curve or downward curve) indicates how a given body part is positioned.

## Figures Are Stacks of Cylinders



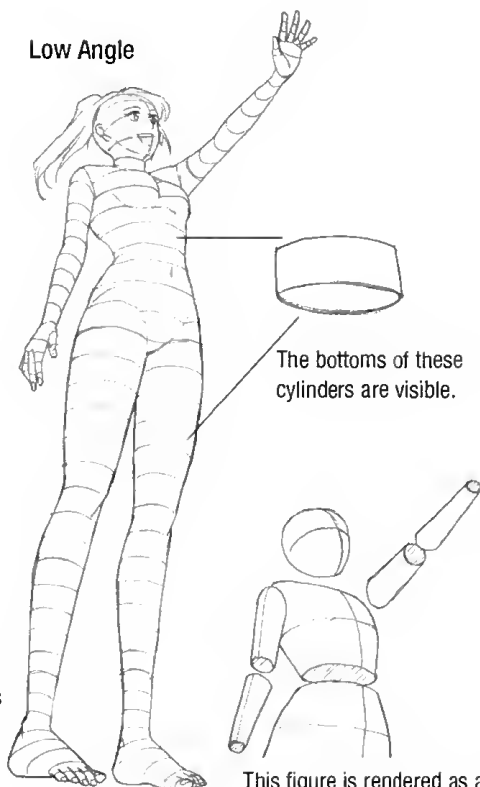
### Standard Standing Pose Angle



At a standard angle, the entire body should be drawn using downward curves. These curves are reflected in the downward curve of a skirt and other clothing.

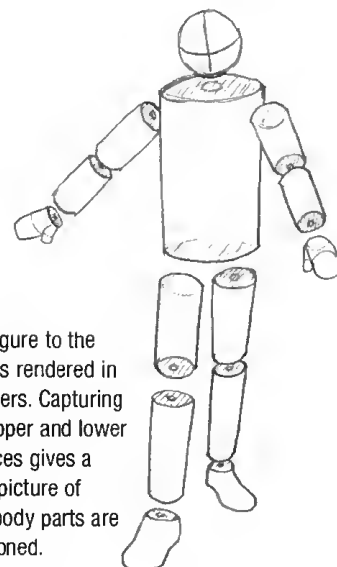
Virtually all parts are short cylinders seen from a high angle (the tops are visible).

### Low Angle



From a low angle, the figure's curves shift upward.

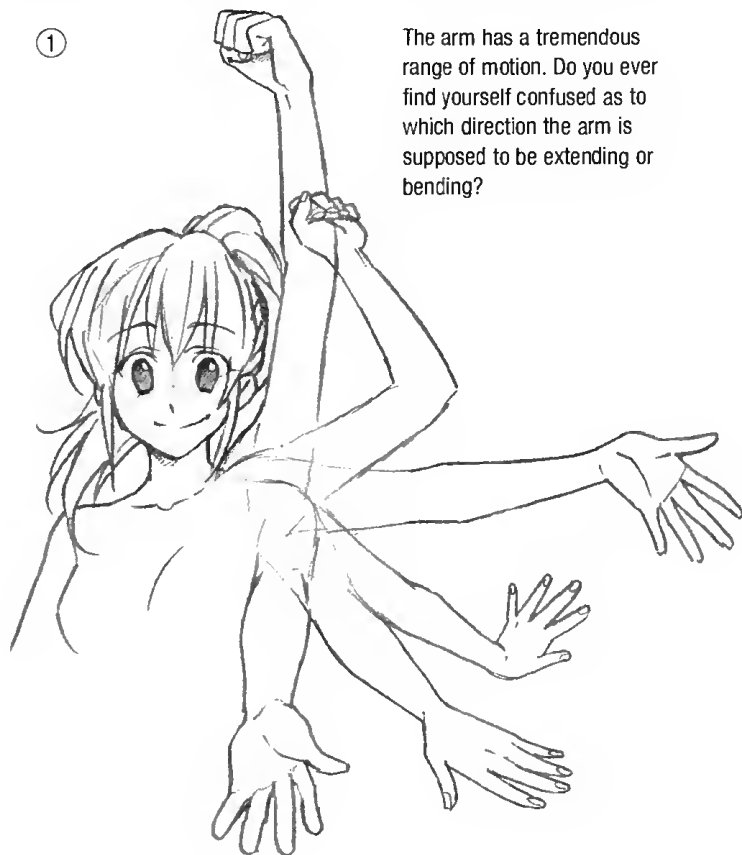
This figure is rendered as a basic block manikin.



The figure to the right is rendered in cylinders. Capturing the upper and lower surfaces gives a clear picture of how body parts are positioned.

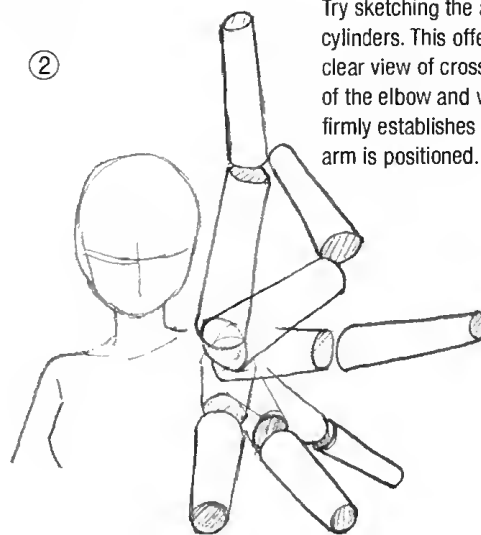
## Rendering Body Parts as Cylinders Indicates How They Are Positioned

①



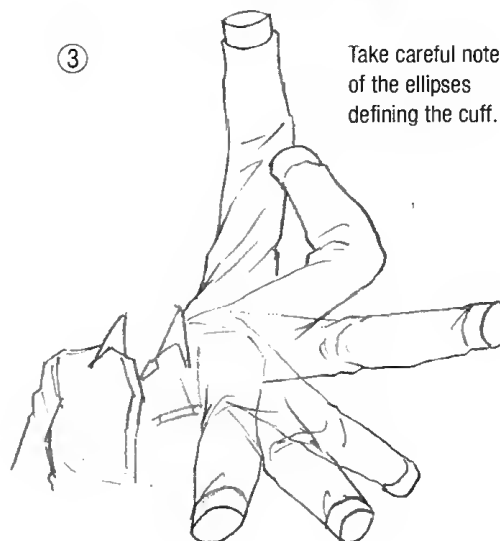
The arm has a tremendous range of motion. Do you ever find yourself confused as to which direction the arm is supposed to be extending or bending?

②



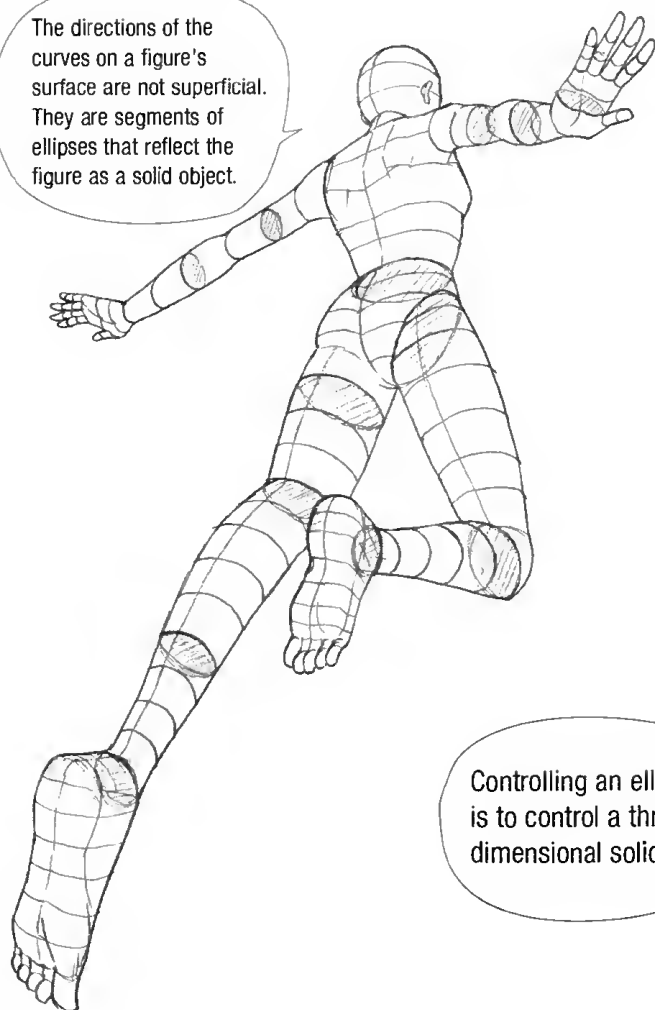
Try sketching the arm as cylinders. This offers you a clear view of cross-sections of the elbow and wrist, which firmly establishes how the arm is positioned.

③



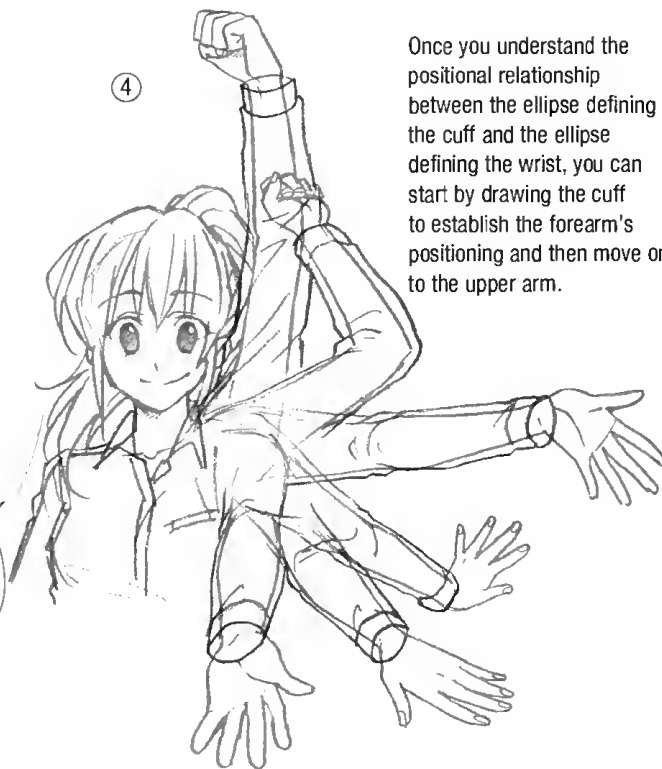
Take careful note of the ellipses defining the cuff.

The directions of the curves on a figure's surface are not superficial. They are segments of ellipses that reflect the figure as a solid object.



Controlling an ellipse is to control a three-dimensional solid.

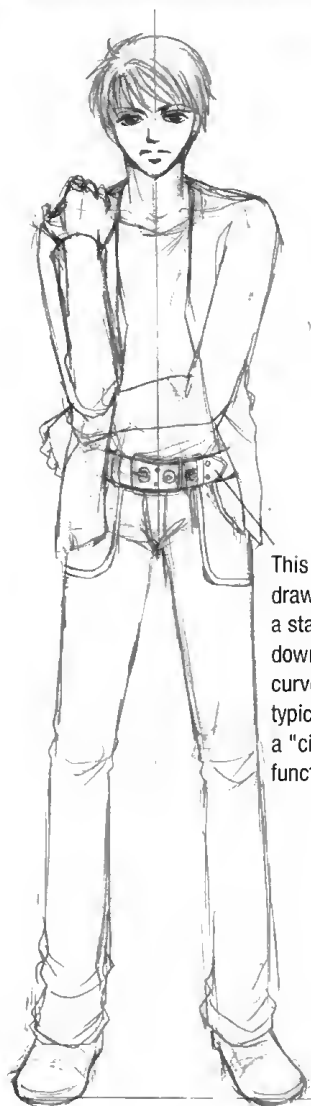
④



Once you understand the positional relationship between the ellipse defining the cuff and the ellipse defining the wrist, you can start by drawing the cuff to establish the forearm's positioning and then move on to the upper arm.

## Belts and Buckles

Belts and buckles tell about the torso. These are typically drawn using downward curves. (They are like the edges of a pipe seen from a high angle.)



This is drawn using a standard downward curve. Belts typically serve a "cinching" function.



This is drawn using a "fashion curve." Belts drawn in this manner loosely hang around the waist, requiring that they take on a more pronounced downward curve.

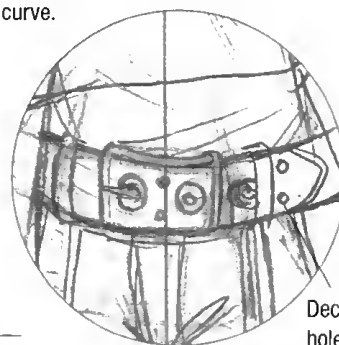
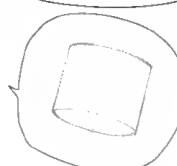
From a standard angle, all body parts underneath the head are drawn from a high angle, looking down.



That is why belts and buckles always take on downward curves.

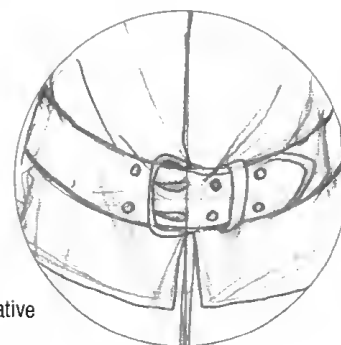


Conversely, belts and buckles take on upward curves when drawn from low angles.



Decorative holes

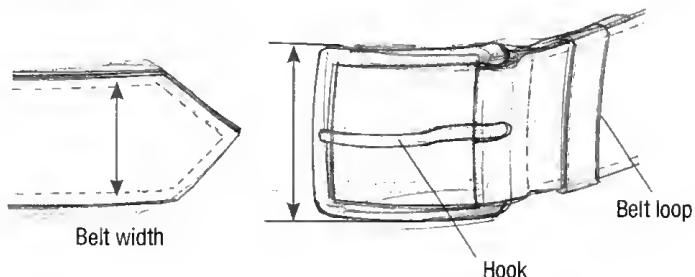
Buckle with single hook



Buckle with double hook

## Sketching Tips

Draw the buckle wider than the belt.



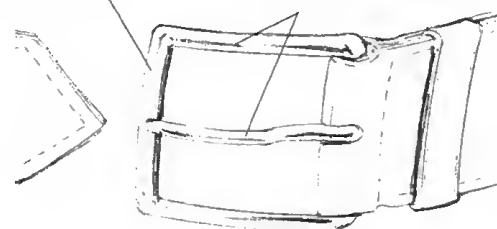
Belt width

Hook

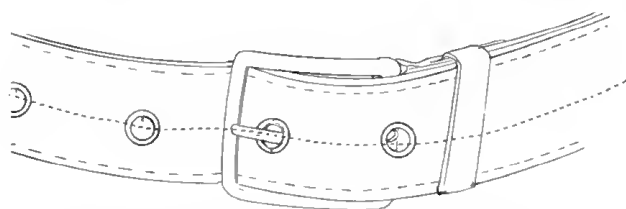
Belt loop

This is block-shaped. The inside was blackened to suggest depth.

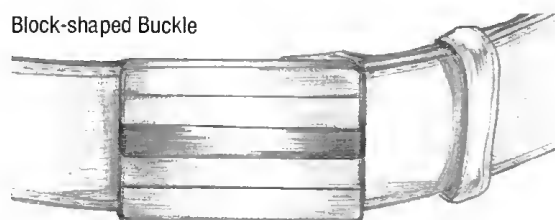
Use solid black on the buckle's tubular parts.



Block-shaped Buckle



Sketch a centerline to ensure that the holes through which the buckle's hook passes are centered along the belt.

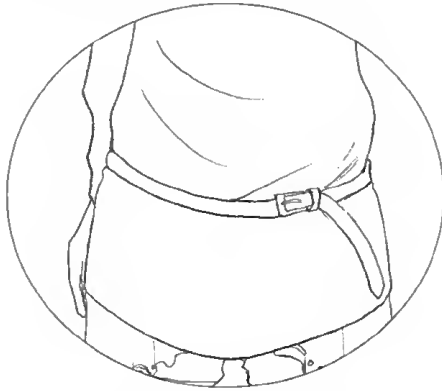


The above shows a block-shaped buckle. Use diagonal hatching to create light-and-dark contrasts.

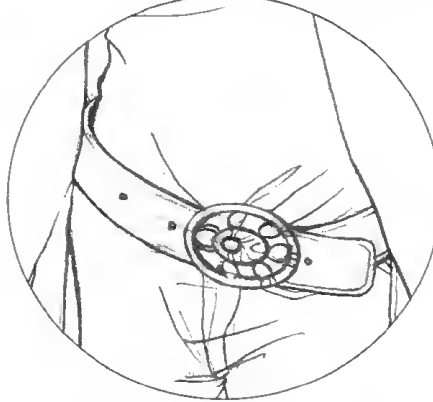


## Common Belt Designs

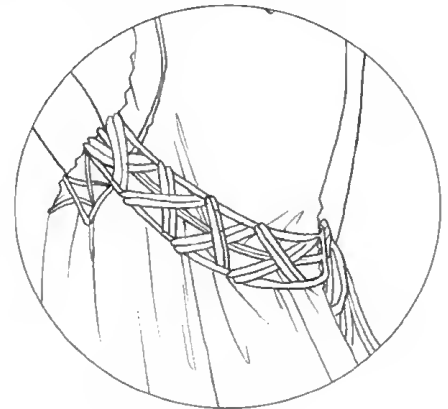
You can create a host of different belt styles by changing the belt's thickness, color, buckle shape, or other feature.



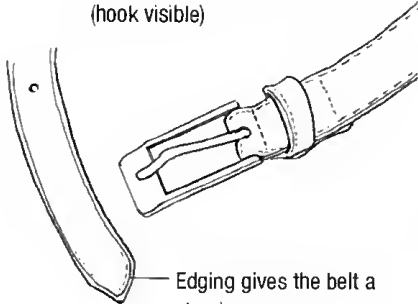
Narrow belt with buckle closure  
(hook visible)



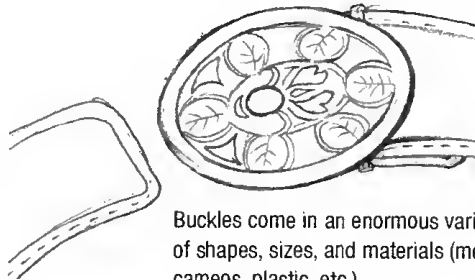
Wide belt with block-shaped buckle closure



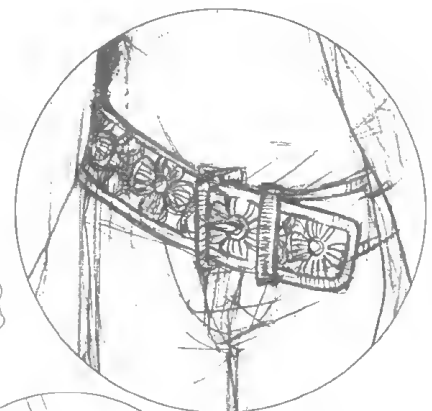
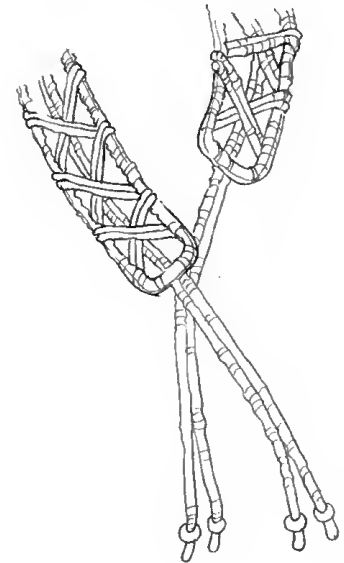
Woven belt with tie closure



Edging gives the belt a classier appearance.



Buckles come in an enormous variety of shapes, sizes, and materials (metal, cameos, plastic, etc.).



The above shows a thick, heavy belt with intricately detailed decorations.



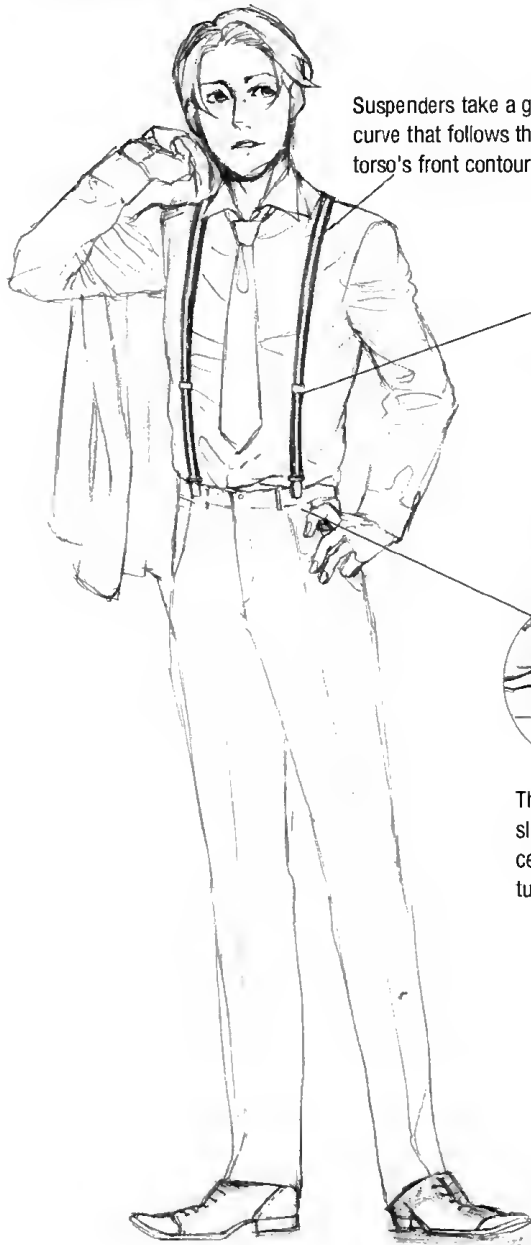
The belts above function more as fashion accessories than to "cinch."



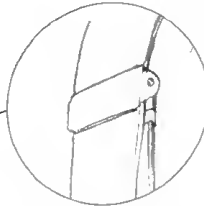
# Suspenders

Suspenders consist of straps that stretch and contract. They are more flexible than belts, allowing ease of movement.

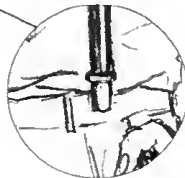
## Common Suspenders



Suspenders take a gradual curve that follows the torso's front contours.

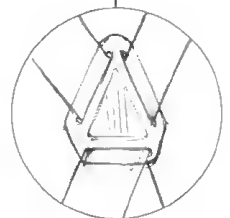


Draw adjusters on the right and left sides at approximately the same level.



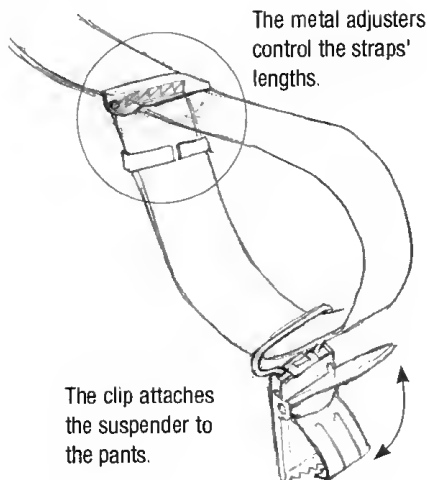
The clip attaches slightly further from center than the tuck.

Bartenders and others occasionally wear cummerbunds over suspenders, as depicted here.



Back adjuster

## Clips



The clip attaches the suspender to the pants.

## Common Styles



X-shaped

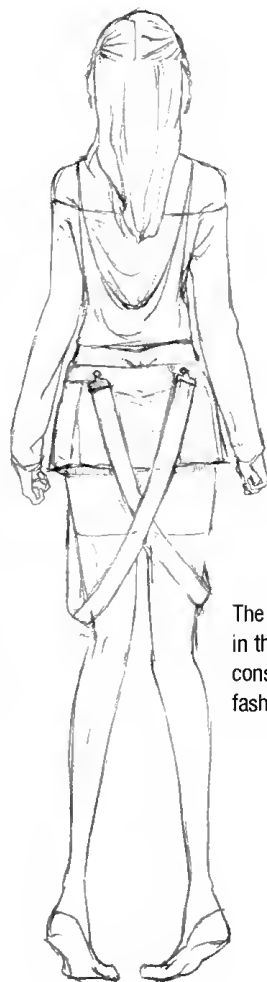


Y-shaped



Fashion Trends in Suspenders

Suspenders worn hanging down

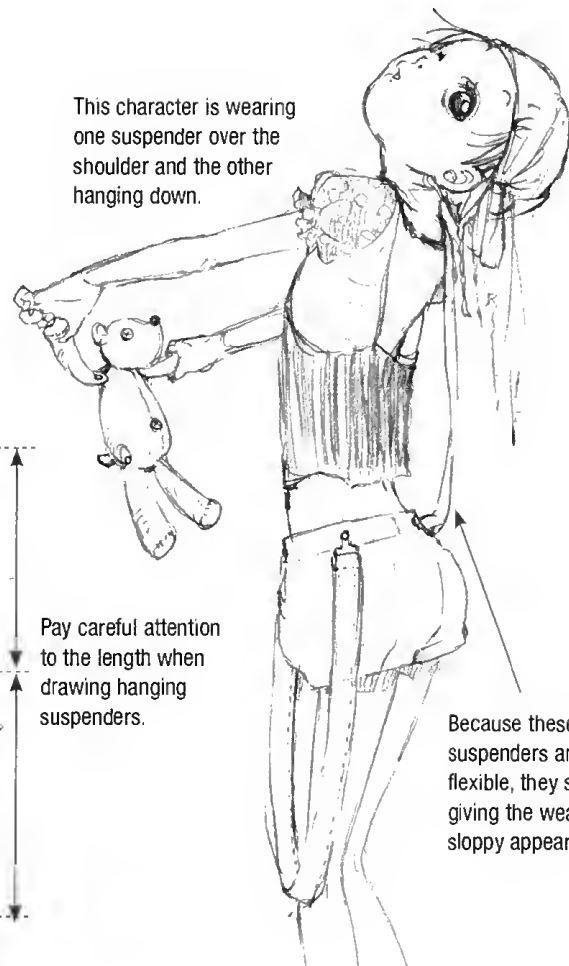


The "X" formed in the rear constitutes a key fashion point.



Chubby characters find belts uncomfortable and often opt for suspenders instead. Suspenders also give the wearer a more dignified, sophisticated air.

This character is wearing one suspender over the shoulder and the other hanging down.

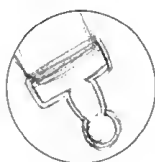


Pay careful attention to the length when drawing hanging suspenders.

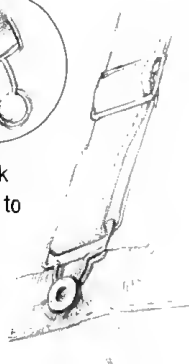
Because these suspenders are not flexible, they sag, giving the wearer a sloppy appearance.



Hook



This hook attaches to a button.



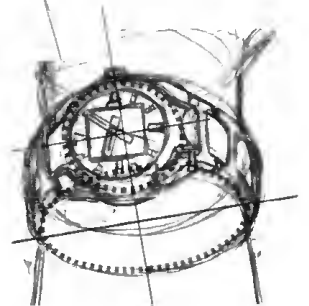
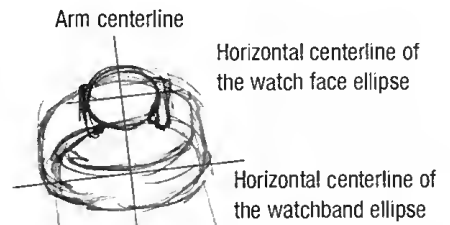
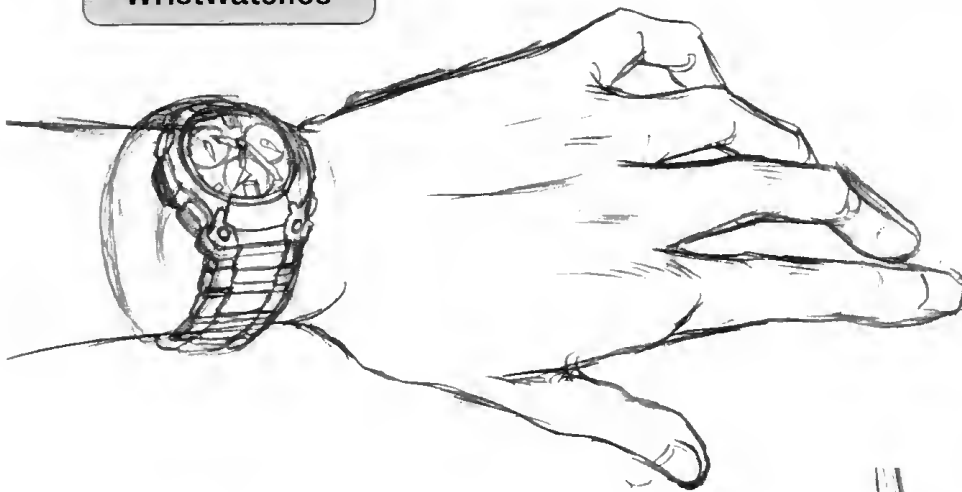
These are flat straps that neither stretch nor contract.

# Arms and Hands

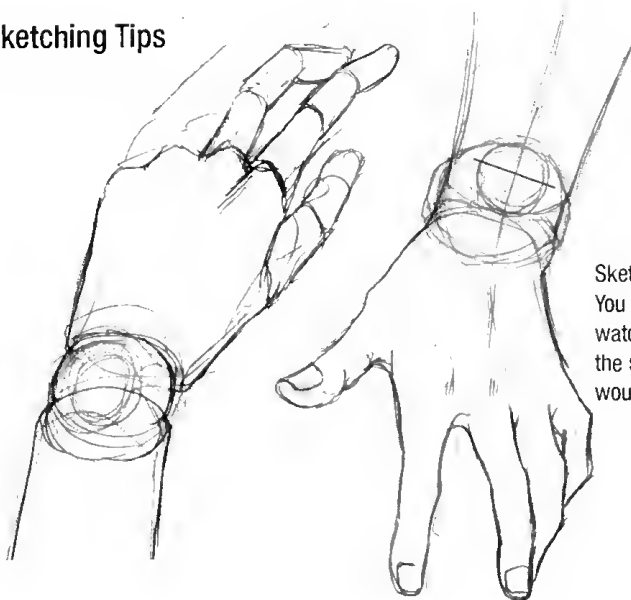
Give characters accessories on their arms and props in their hands.

## Wristwatches

Draw the wrist as a solid (sketch the wrist ellipse).



## Sketching Tips



Sketch the wrist layout. You may draw the watchband ellipse using the same ellipse that you would a shirt cuff.

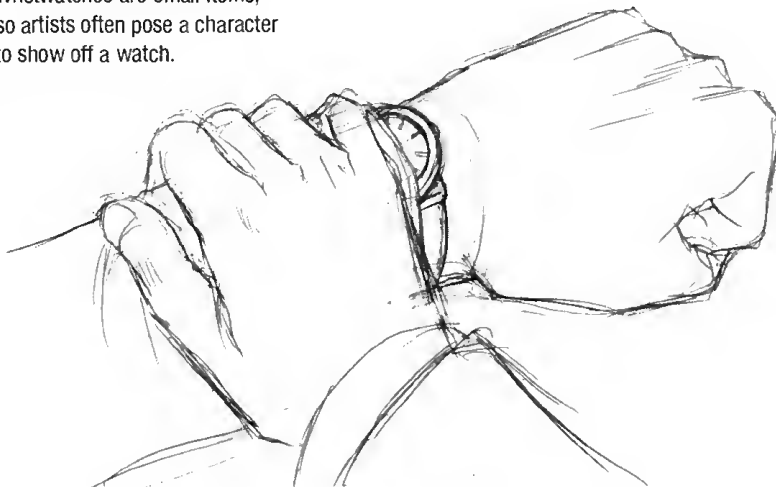


The shirt cuff and the watchband take the same curve.

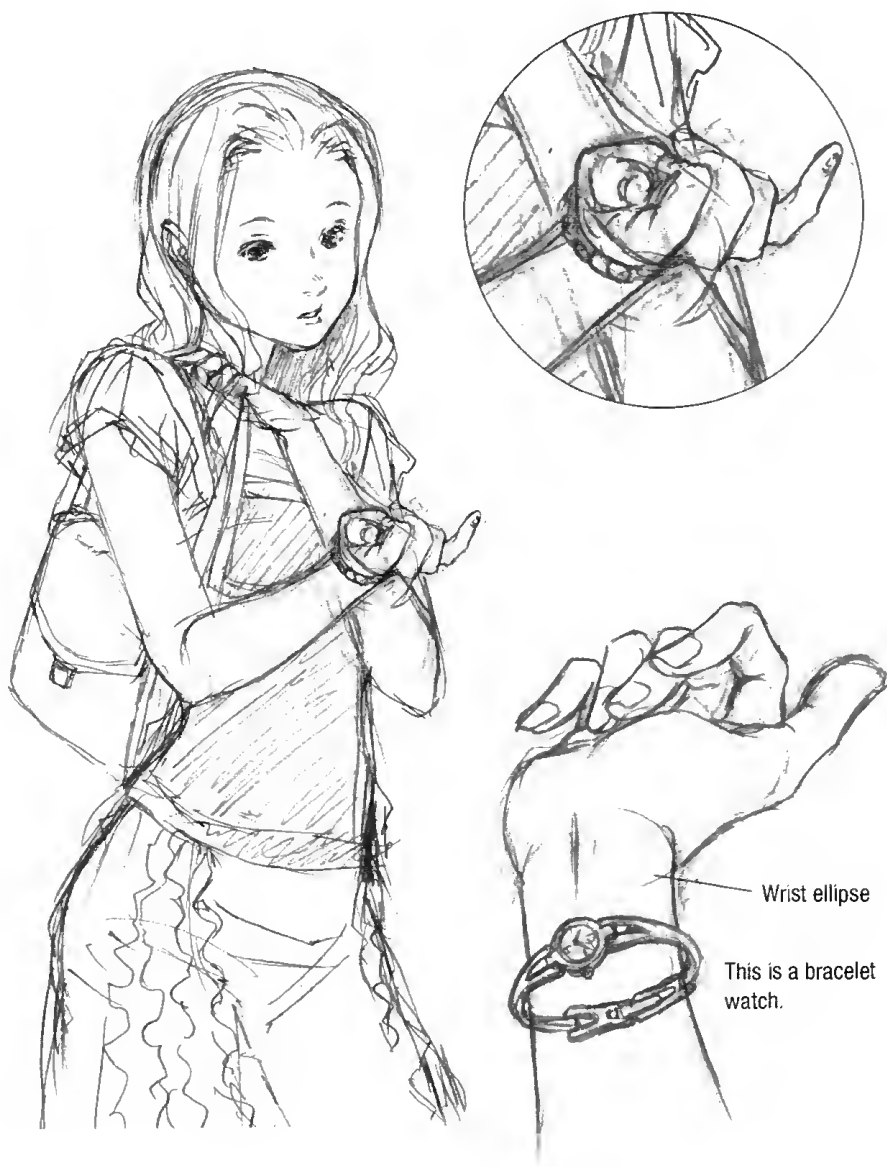
Both the watch face ellipse and the watchband ellipse lie perpendicular to the arm.

## Posing to Show off a Watch: Watch Face Worn on the Outside

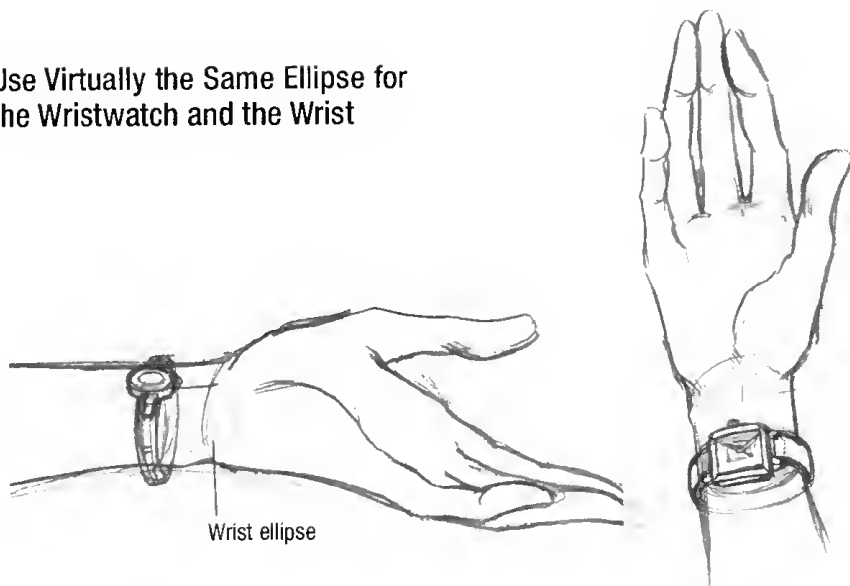
Wristwatches are small items, so artists often pose a character to show off a watch.



## Posing to Show off a Watch: Watch Face Worn on the Inside



Use Virtually the Same Ellipse for the Wristwatch and the Wrist



## Pocket Watches

This is a somewhat large fob with a cover.



This is a somewhat small fob without a cover.



Artists use the characters' poses and chains to show off pocket watches, drawing a character looking at his or her watch.



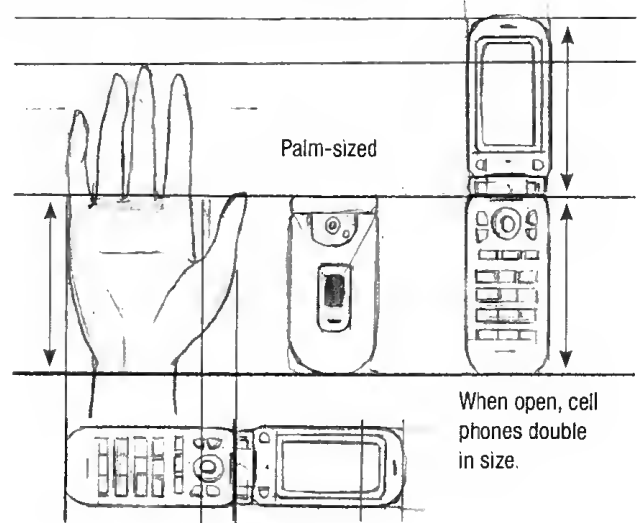
## Cell Phones

### Talking



Most cell phones are approximately the size of the palm of your hand. Draw them as blocks with just a shallow depth.

### Common Cell Phone Dimensions



### Sketching Tips

This line establishes the ear's angle.

The phone's surface generally lies at the same angle as the ear.

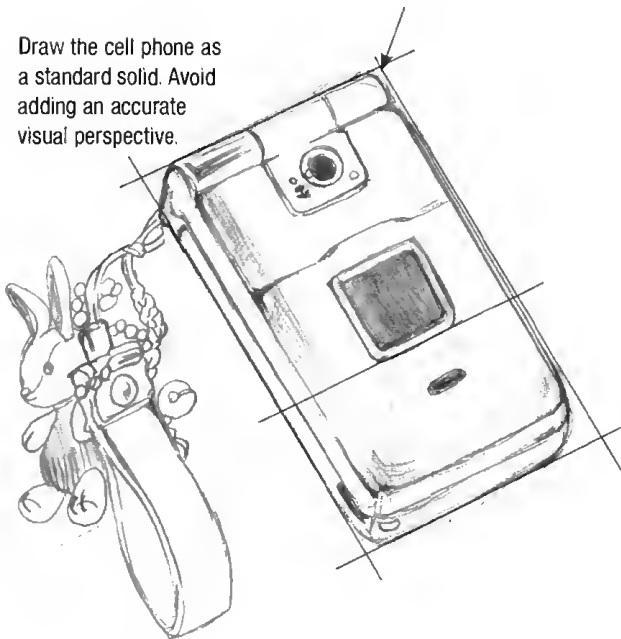
The transmitter is located in the top section. The speaker holds the top section of the phone against his or her ear.



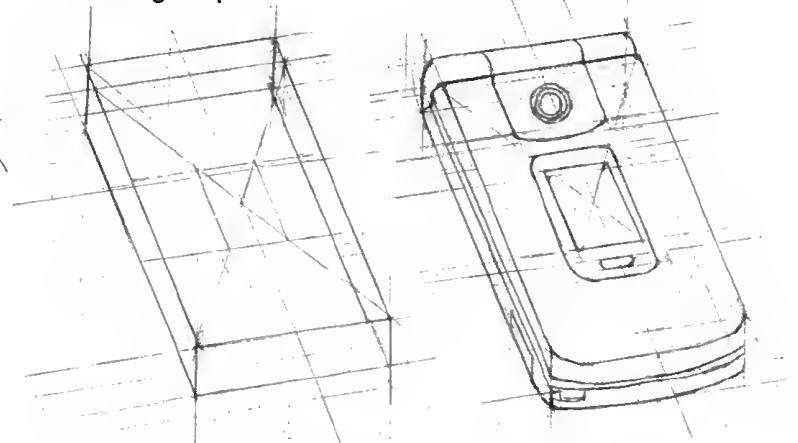
The key is the angle at which the phone is held against the ear and its position.

Draw the cell phone as a standard solid. Avoid adding an accurate visual perspective.

Round the corners.



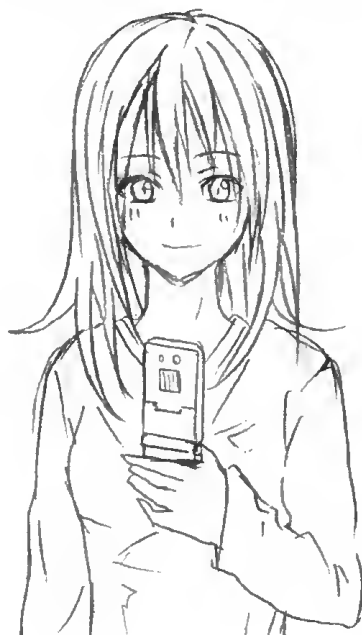
### Sketching Steps



① Draw a block, keeping the vertical, horizontal, and depth lines parallel, accordingly.

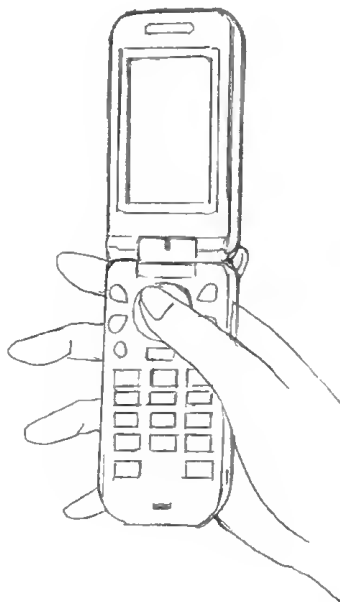
② Round the corners and fill in the details.

## Texting and Mailing or Texting Photos

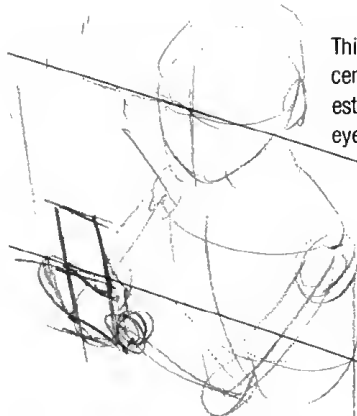


If the character is tiny or if you are composing a long composition, draw the cell phone on the large-side.

Use the hand as a yardstick when establishing the cell phone's size.



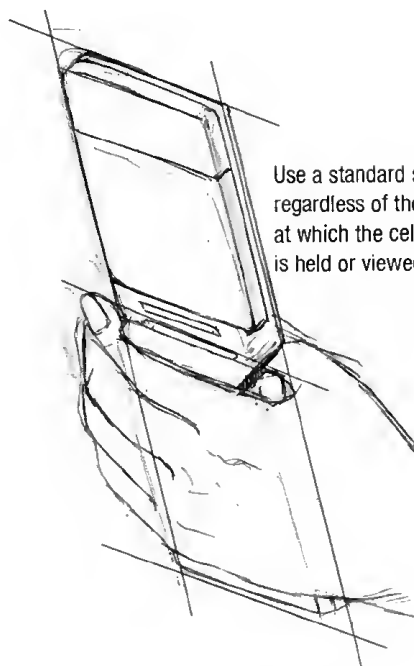
Drawing the phone according to the laws of perspective would make it appear deformed and visually awkward.



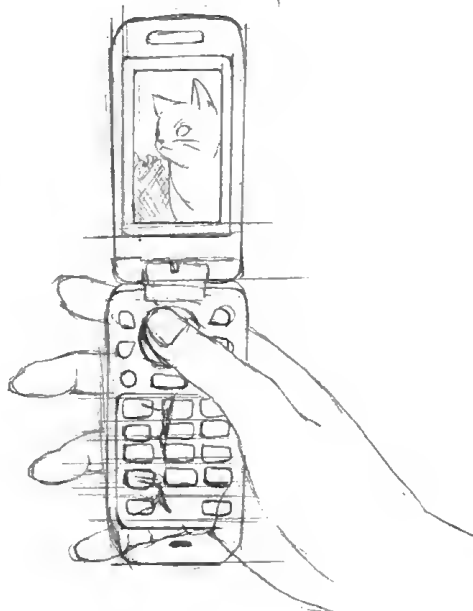
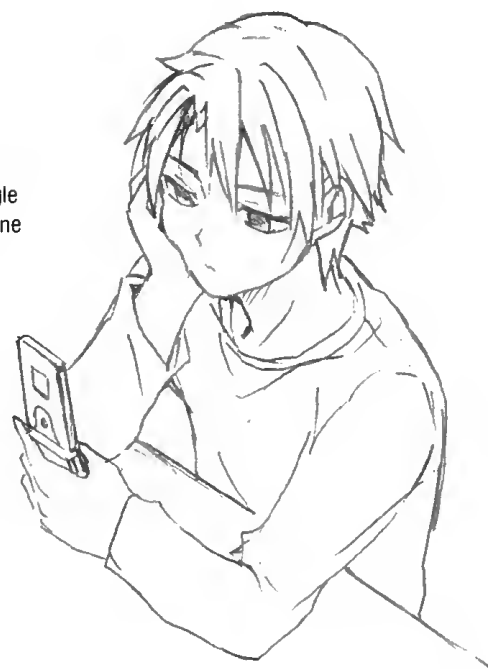
This horizontal centerline establishes the eyes' height.

This is the cell phone's horizontal layout line.

To make a character look at a cell phone, draw the character's face's horizontal centerline and the cell phone's horizontal centerline parallel to one another. This creates the impression that the character and the cell phone are facing each other.



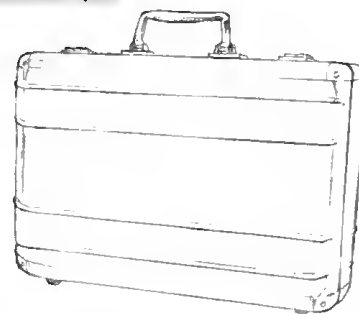
Use a standard solid, regardless of the angle at which the cell phone is held or viewed.



## Bags

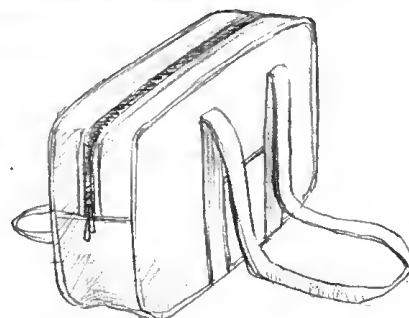
A bag is an indispensable prop that illustrates a given character's lifestyle. Draw bags as standard solids, using a block as the base form.

### Bags with Straps or Handles on Top



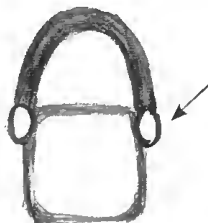
Attaché cases, etc.

### Bags with Straps or Handles on the Front and Back



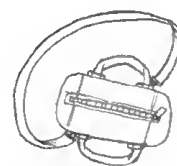
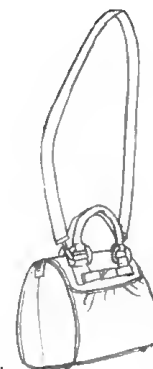
Tote bags, schoolbags, etc.

### Bags with Straps on the Sides



Handbags, shoulder bags, etc.

### Backpacks and Bags with Adjustable Straps



Backpacks, one-shoulder packs, etc.

Convertible bags, etc.  
(bags that function as  
clutches or handbags,  
backpacks, and/or  
shoulder bags)



Bags are essentially "blocks." Establish the proportional size of the character to the bag when drawing.







## Bags with Straps or Handles on Top

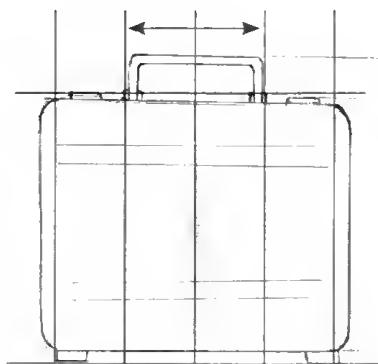
Leather briefcases, armor-plated attaché cases, trunks, and other sturdy cases emphasizing function.

### • Attaché Cases

Use the human figure as a basis for determining the case's overall size.

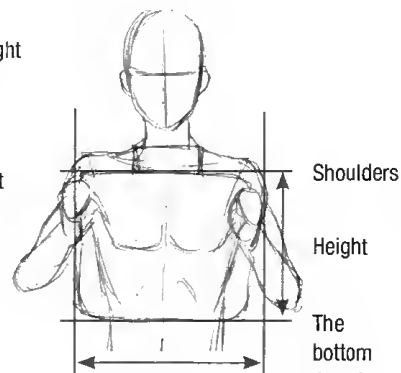
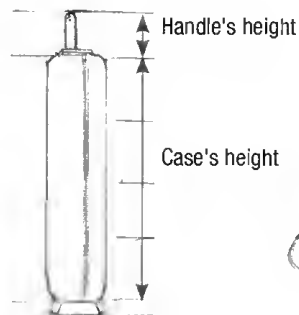


Handle and case



The case's length is double the handle's length.

Scale Comparison with Human Figure



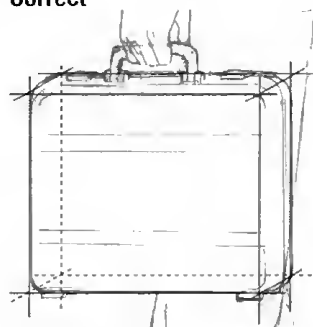
The case is shoulder-width in length.

Shoulders  
Height  
The bottom lies high on the waist.



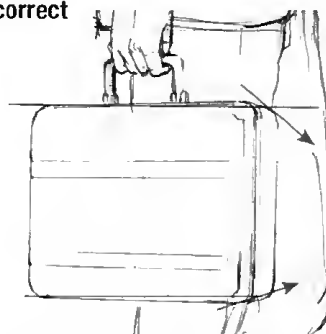
Cases run between 5 cm (approx. 2") and 10 cm (approx. 4") in depth; although, deeper cases exist.

Correct



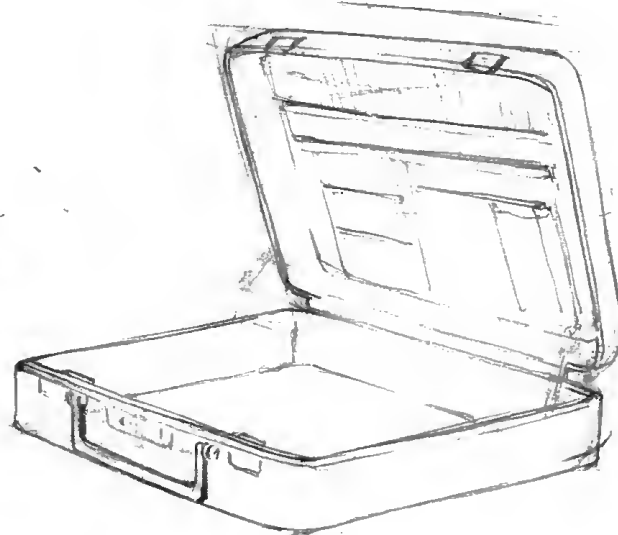
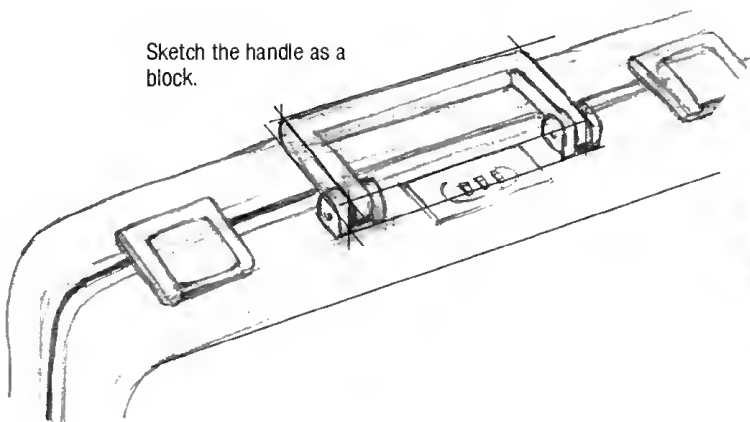
The above shows a standard solid with each side facing each other. The top is visible.

Incorrect



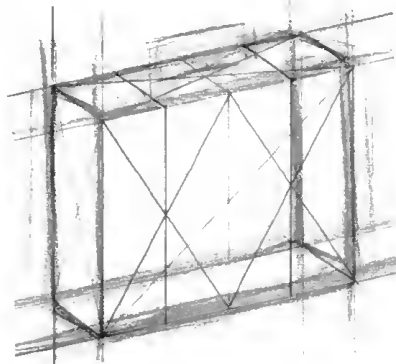
To give the case depth, the artist got caught up in drawing the side in perspective but ultimately forgot to draw the top in perspective as well.

Sketch the handle as a block.

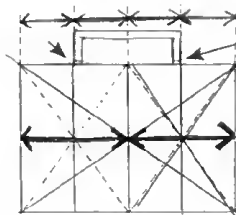


When you intend to make a case appear big or want a composition with impact, draw the case in perspective.

## Sketching Steps

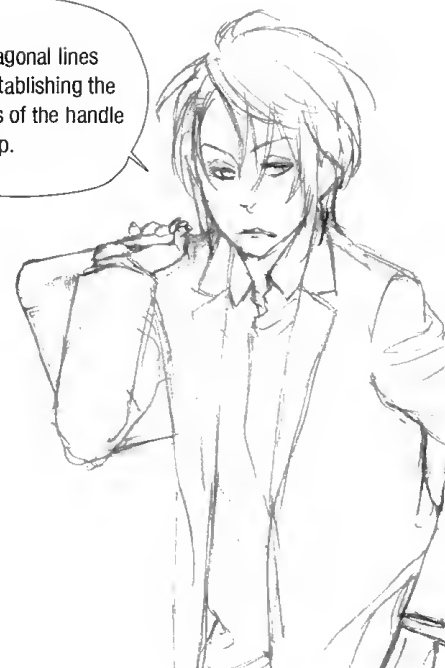


Draw diagonal lines while establishing the positions of the handle and clasp.

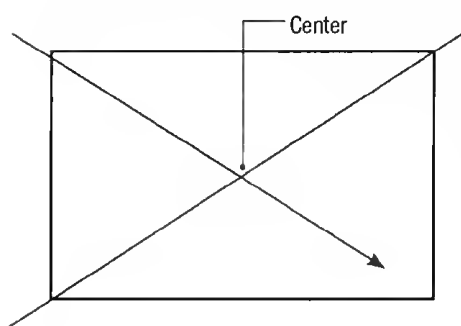


Handle position guide

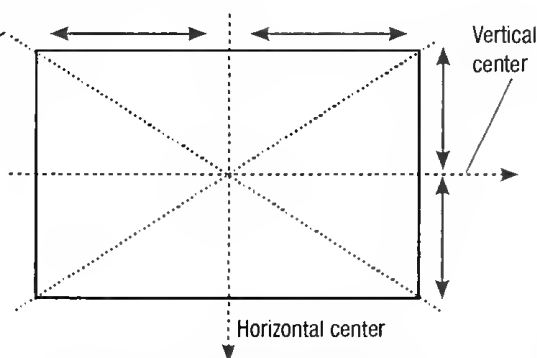
Use the "X method" to locate the center and draw the case.



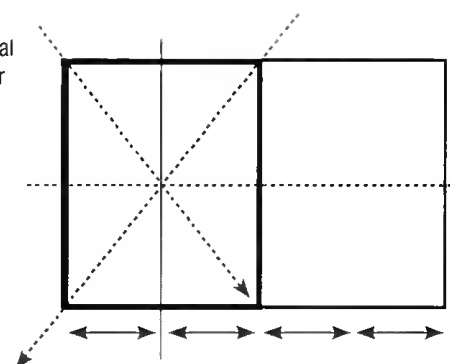
### "X Method": Dividing the Case Horizontally into Four



The juncture where the lines intersect is the shape's center.

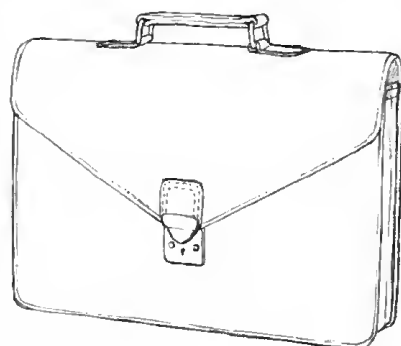


Drawing parallel vertical and horizontal lines from the center produces the vertical and horizontal centerlines.



Repeating this process allows you to create lines that function as guides in establishing the positions of the case's parts.

### Cases with Handles on the Top



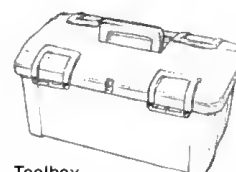
Briefcase



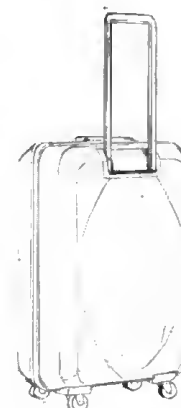
Schoolbag



Portfolio

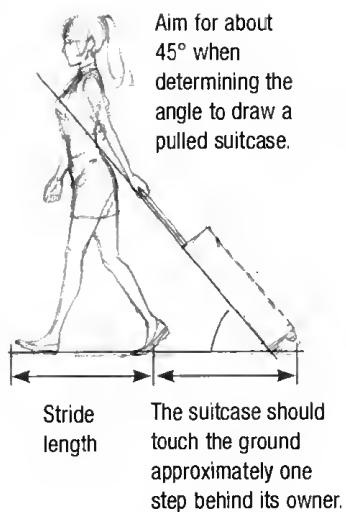
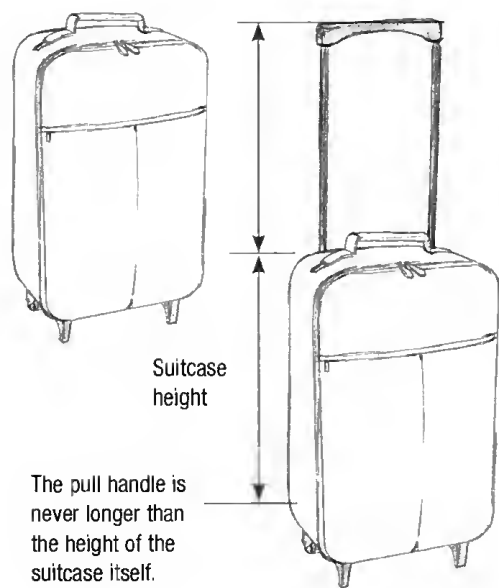


Toolbox

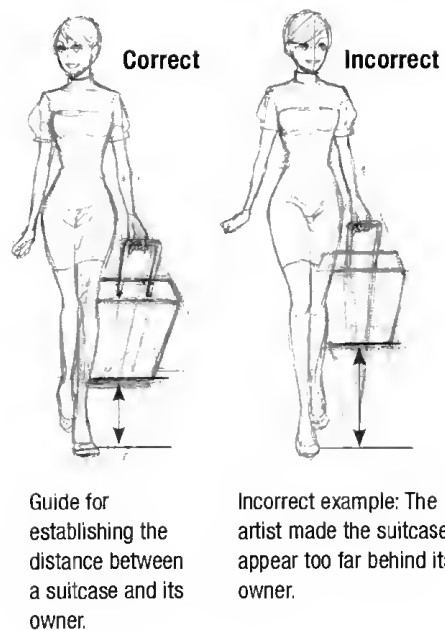


Suitcase

# • Suitcases



Front views



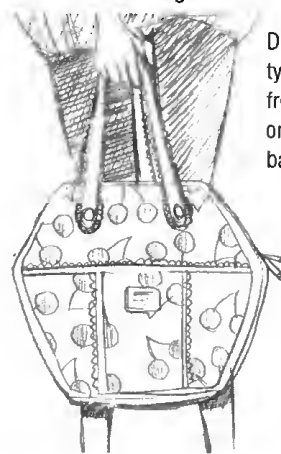


## Bags with Straps or Handles on the Front and Back

A tremendous variety of bags ranging from functional to fashionable come with straps and handles attached to the front and back, such as shopping bags, tote bags, school bags, and many more.

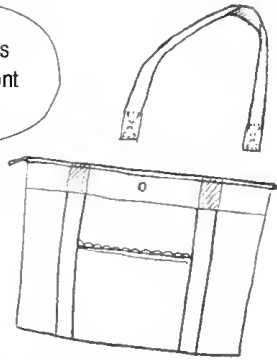
### • Fashionable Bags

Designers exploit this type of bag's visible front, adding patterns or shapes to make the bag more stylish.



### • Functional Bags

These are primarily sturdy and comfortable to use.



### • Functional and Fashionable

The bag shown here comfortably hangs from the woman's arm, allowing her two free hands.

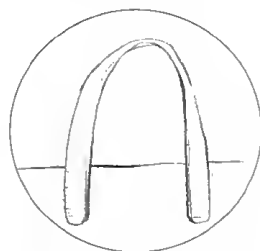


Portray the arm's curve when sketching the bag.

### Sketching Tips

Correctly depict differences in handle and strap types.

#### Straps That Twist

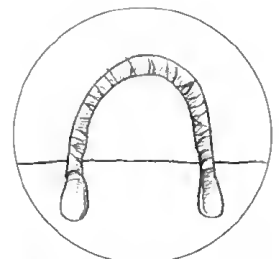


Because they twist, the underside becomes visible, and the straps' width appears to vary.

The straps are bar-shaped.



#### Straps That Do Not Twist



These straps do not twist, so their width is virtually uniform.

The straps are thick and rounded.



# • School Bags



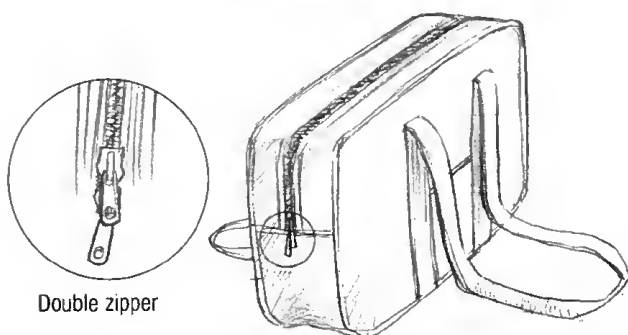
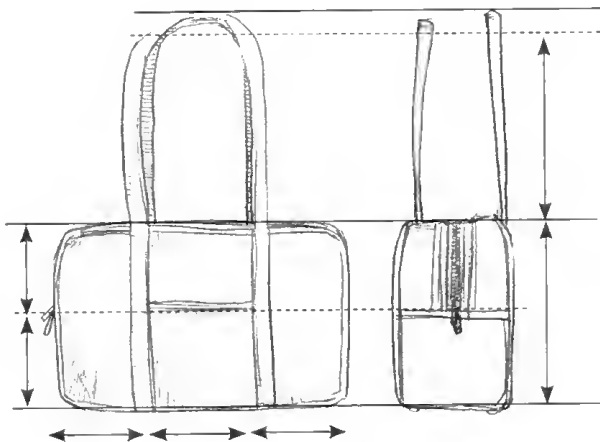
Scale  
Comparison  
with Human  
Figure



School bags  
typically hang  
from the  
shoulder.



This disheveled student  
wears his bag sloppily  
against his back.



Double zipper

## Bags with Straps or Handles on the Front and Back



Casual bag



Shopping  
basket



Briefcase



Recyclable  
shopping bag



## Bags with Straps on the Sides

These include handbags, casual bags, shoulder bags, duffle bags, and a wide variety of other bags.

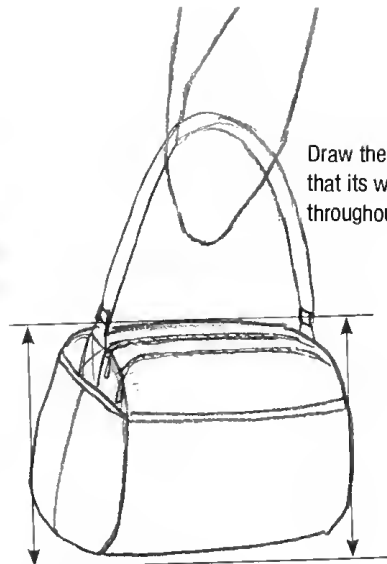


### Sketching Tips

#### Capturing the Form



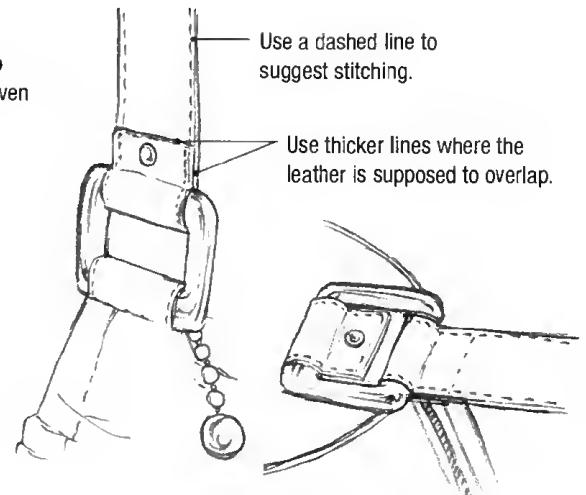
**Rough sketch**  
Draw the portion of the strap touching the arm to establish how the strap connects.



**Cleaned-up Sketch**  
Use a standard solid to ensure that the left and right widths are the same.

Draw the strap so that its width is even throughout.

#### Sketching the Details



Use a dashed line to suggest stitching.

Use thicker lines where the leather is supposed to overlap.

Add solid black to the buckle. This evokes a sense of three-dimensionality and gives the buckle a metallic look.

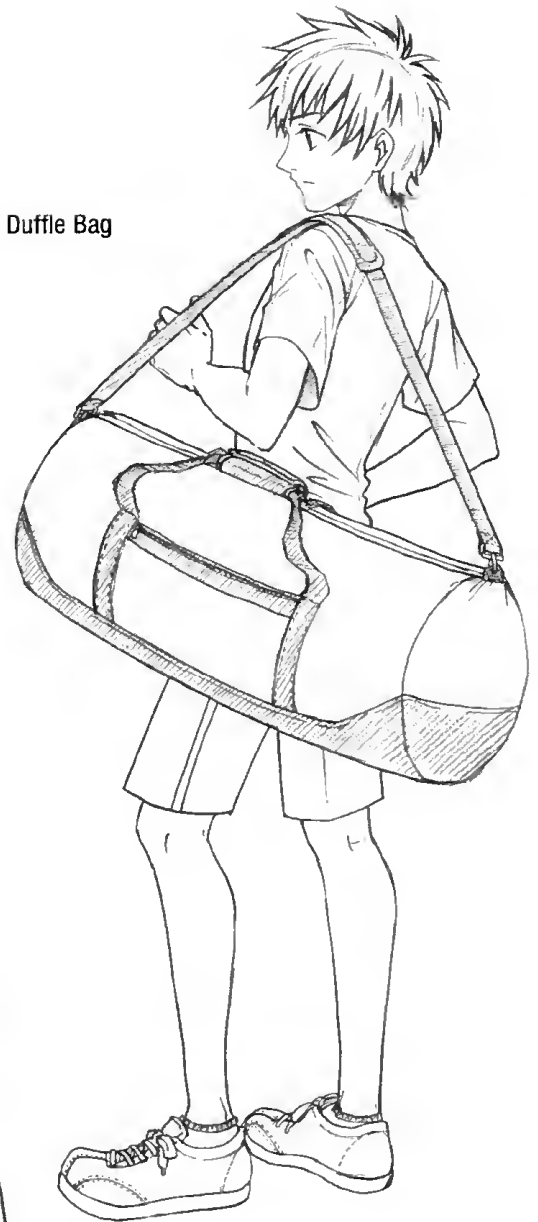
## • Shoulder Bags



This boy is wearing his bag from one shoulder and across his body. Maintain awareness of how the strap forms an ellipse when drawing.

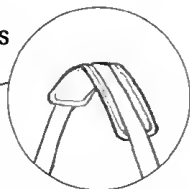


Duffie Bag



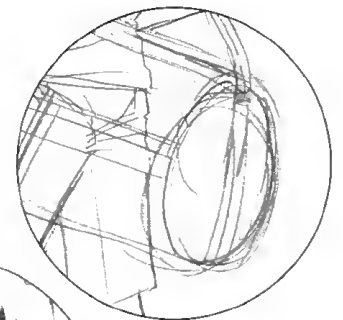
### Characteristics of Shoulder Bags

The bags have adjustable straps.

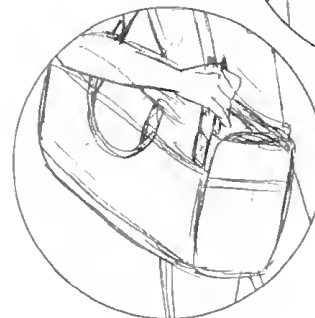


Shoulder straps come with shoulder grippers.

### Sketching Tips



Clearly indicate whether the basic shape is circular or square.



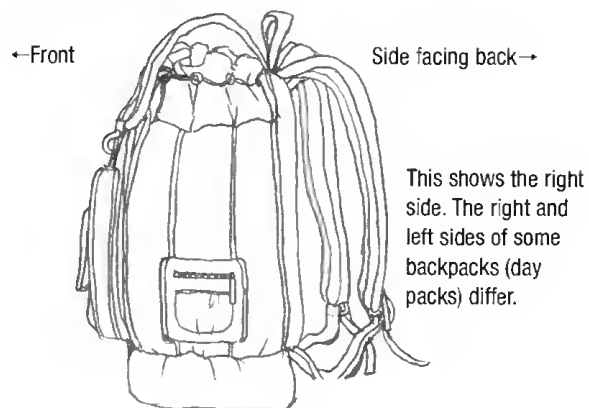


# Backpacks

## • Backpacks (Day Packs)



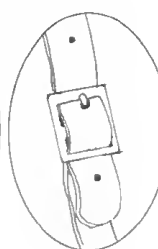
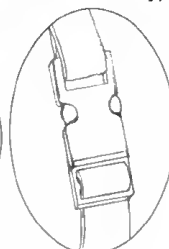
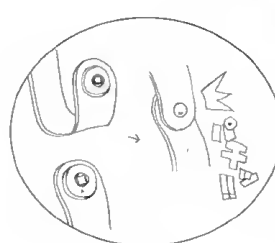
### Profile/Right Side



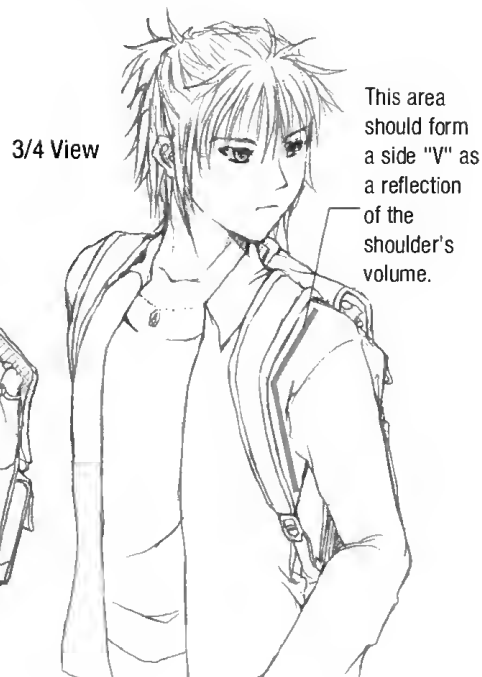
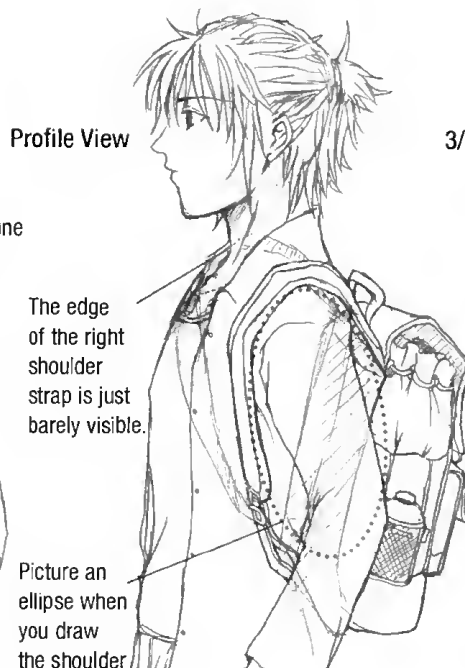
### Front and Side Facing Wearer's Back



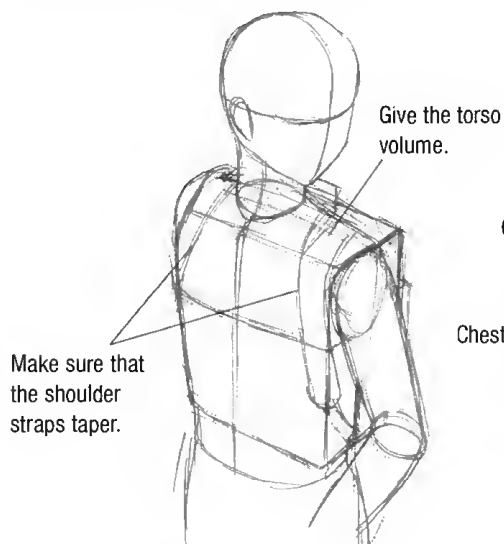
Backpacks come with three types of fasteners.



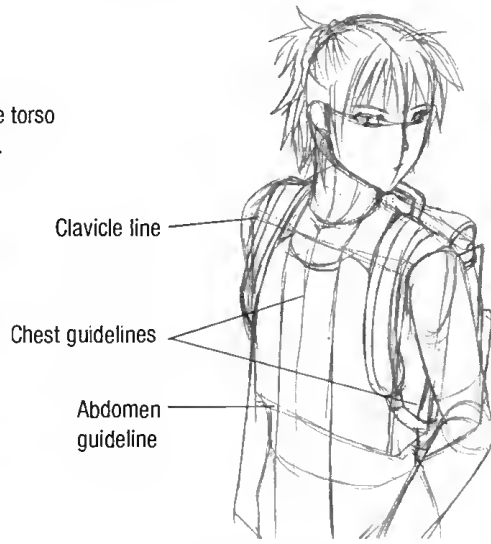
Draw the right and left fasteners so they lie parallel to the shoulder line.



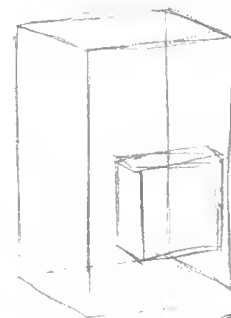
## Sketching Tips: Draw the Character as a Standard Solid



Sketch the torso's layout as a block.



Use the horizontal layout lines as guides to proportion the shoulder straps correctly.



Use a block as the backpack's base form.



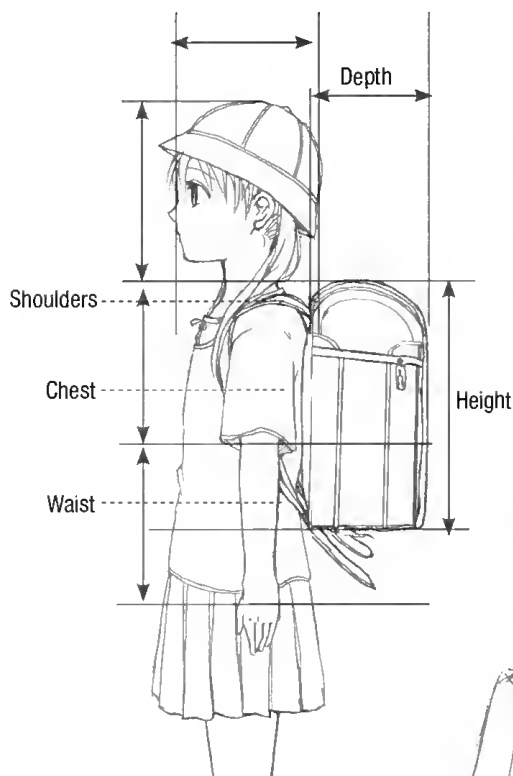
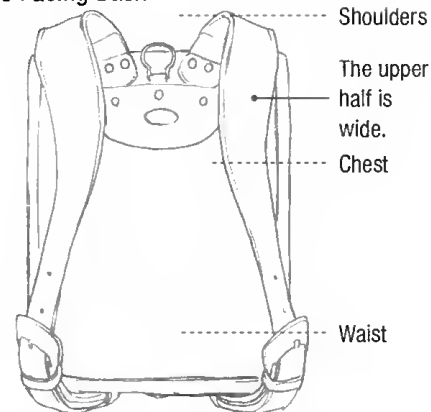
### • Schoolbags

Make the bag's depth equal to or greater than the wearer's head.

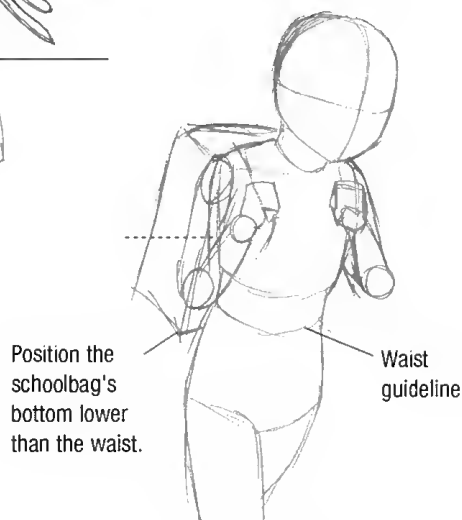
Rear Side



Side Facing Back



### Sketching Steps



① Sketch the layout.



② Adjust the forms.



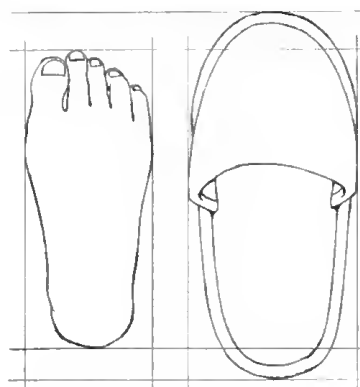
③ Clean up the lines and add the details to finish.

# Footwear

Footwear creates an impression of the character.

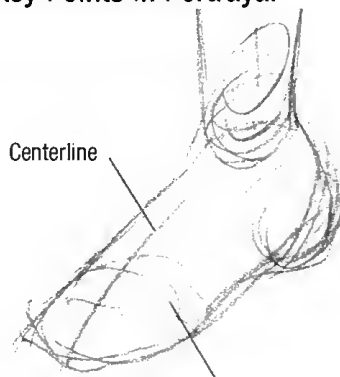
## The Slipper Is the Most Basic Shoe

Shoes reflect the shapes of the feet they envelope but in simplified form. If you can draw a slipper, then you can draw a shoe.

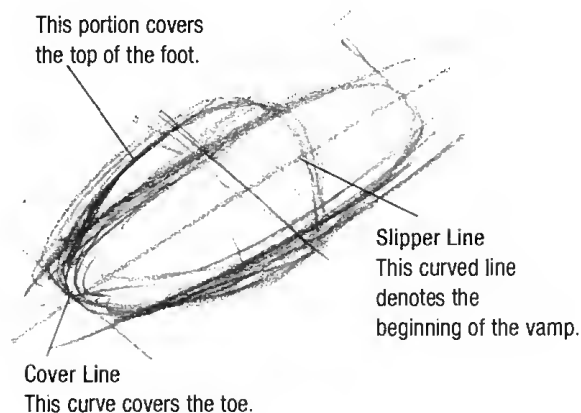


While the foot is a more complicated shape, the slipper forms a simple ellipse.

### Key Points in Portrayal

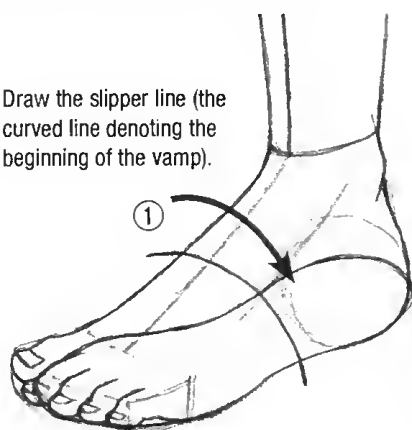


This line defines the toe as well as describes the arc of the top of the shoe.

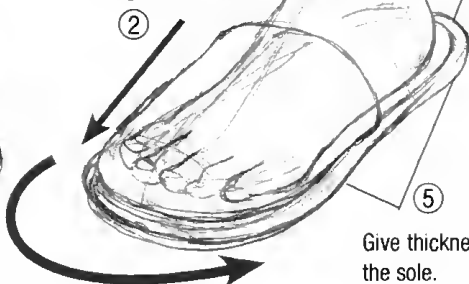


### Steps to Sketching a Slipper

Draw the slipper line (the curved line denoting the beginning of the vamp).



Draw the line covering the back of the foot.



4 Draw the sole.

5 Give thickness to the sole.

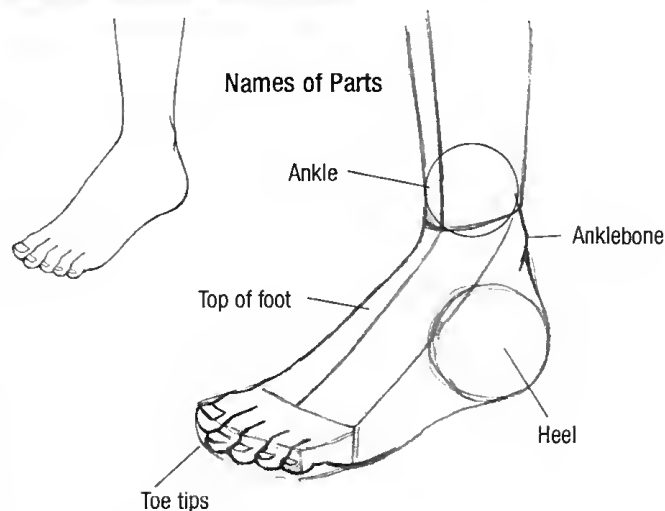
3 Draw the cover line, which covers the toe.

You can draw any type of footwear following these steps.



### Basic Points on Feet

#### Names of Parts

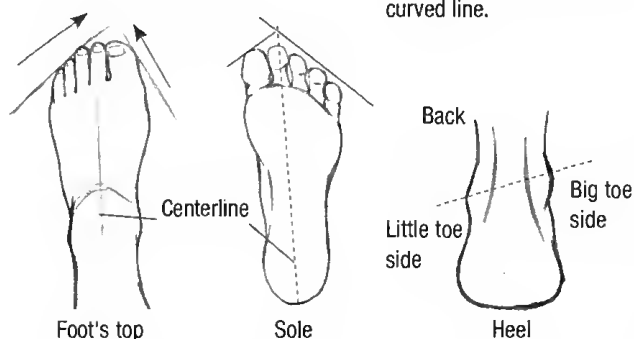


The sole's contours of the right and left sides do not look the same.



Big toe side: The sole's contour displays bumps and dips.

Little toe side: The sole's contour is a relatively flat curved line.

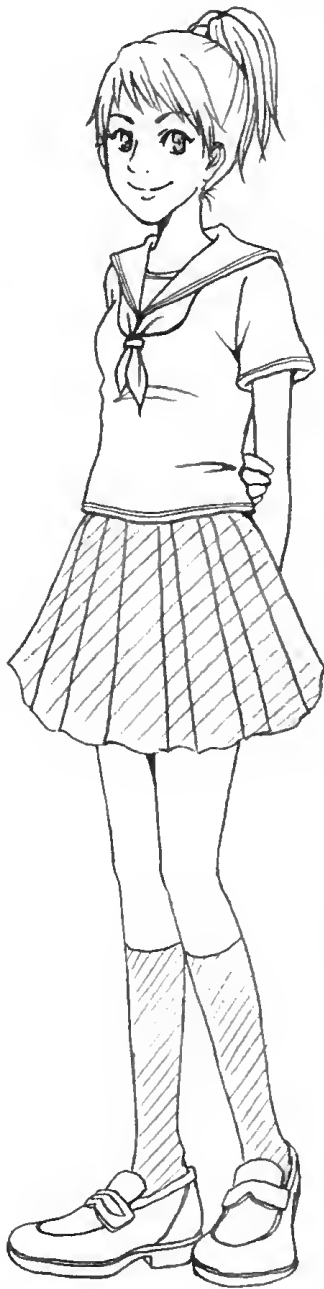


## Common Footwear That Tells about a Character

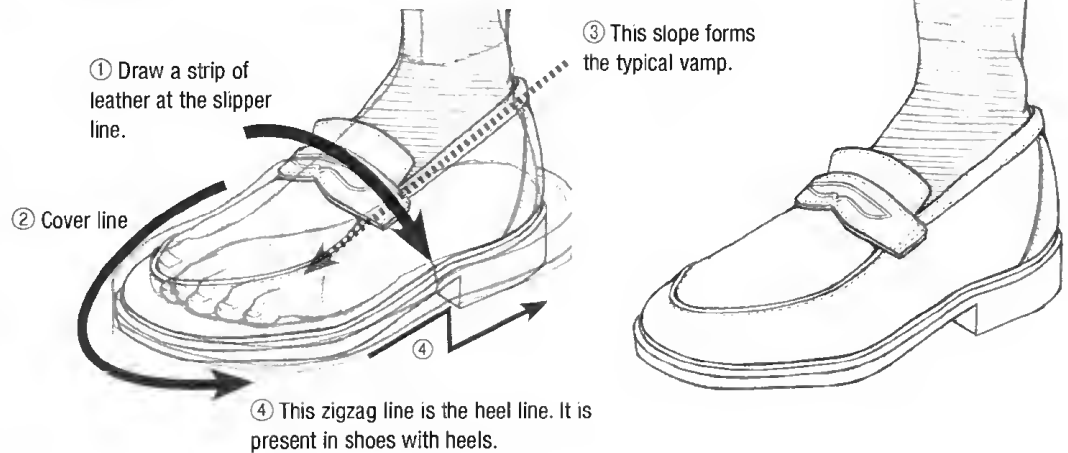
This section discusses tricks to drawing footwear and sketching steps.

### Penny Loafers

Penny loafers are popular articles for portraying school students. Artists tend to use them with school uniform-sporting female junior high and high school students.

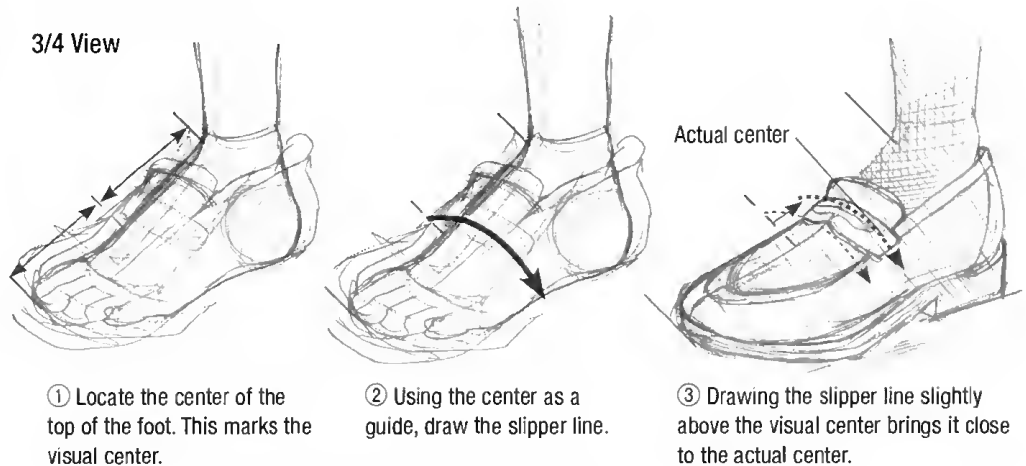


#### Sketching Tips

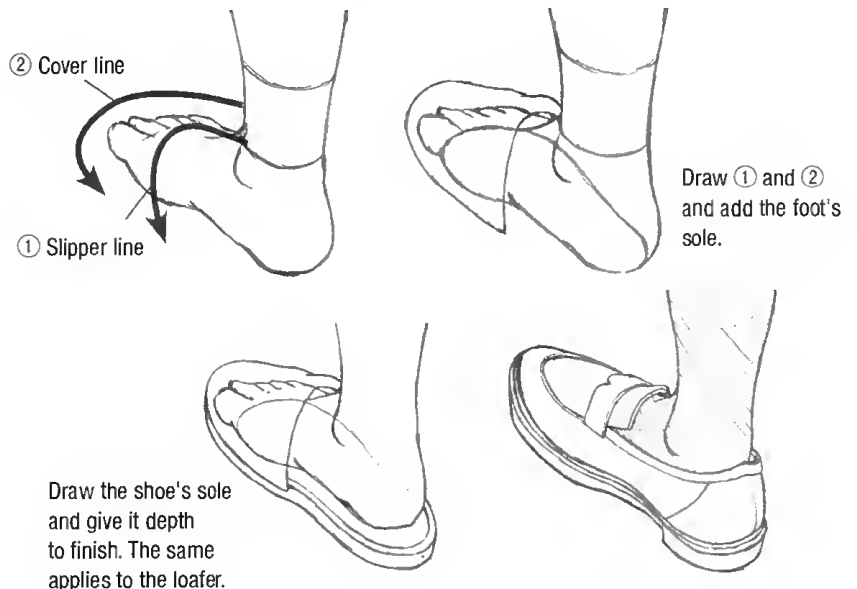


#### Sketching Steps

##### 3/4 View



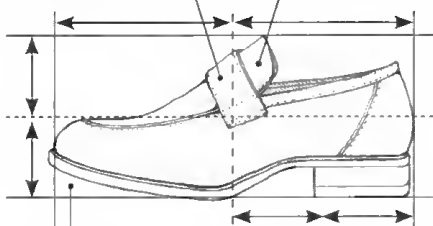
##### 3/4 Rear View (Starting with a Slipper)



#### Key Points in Portrayal

The leather strip is located approximately at the shoe's center.

This is slightly rear of the halfway point.



The toe rises when there is no foot in the shoe and falls somewhat when worn.

The heel is 1/4 the foot's total length.

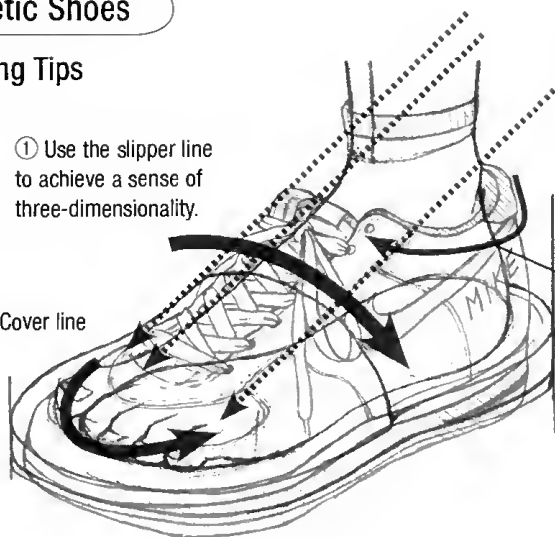
Draw the shoe's sole and give it depth to finish. The same applies to the loafer.

## Athletic Shoes

### Sketching Tips

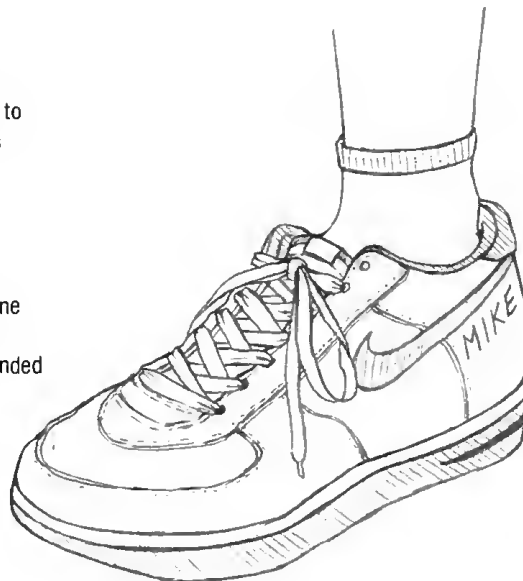
① Use the slipper line to achieve a sense of three-dimensionality.

② Cover line



③ These slope lines enable you to draw the eyelets and tongue.

④ The ankle line is a curve that follows the rounded anklebone.

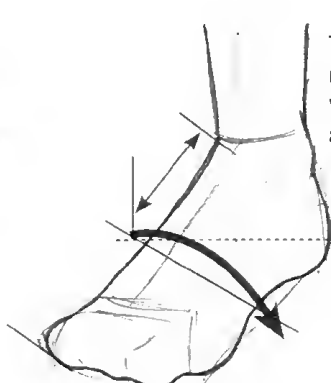


### Sketching Steps

#### 3/4 View

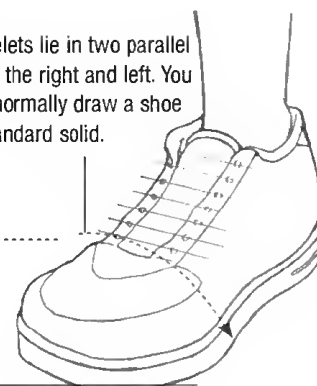


① After sketching an outline of the foot, add the centerline of the foot's top.

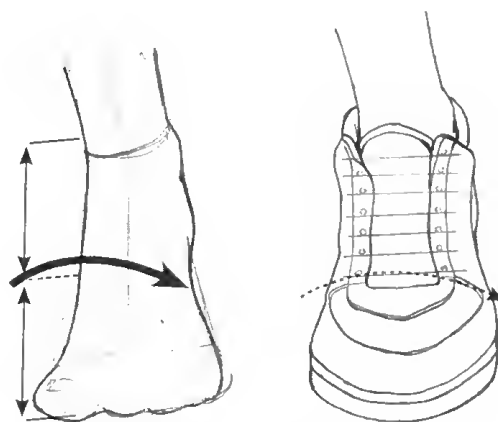
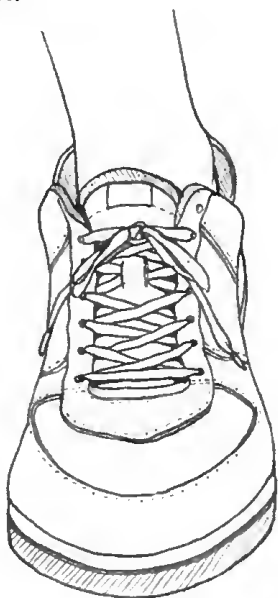


② Draw the slipper line.

The eyelets lie in two parallel rows to the right and left. You would normally draw a shoe as a standard solid.



#### Front View



Use the visual center, the slipper line, and the cover line to draw the shoe.

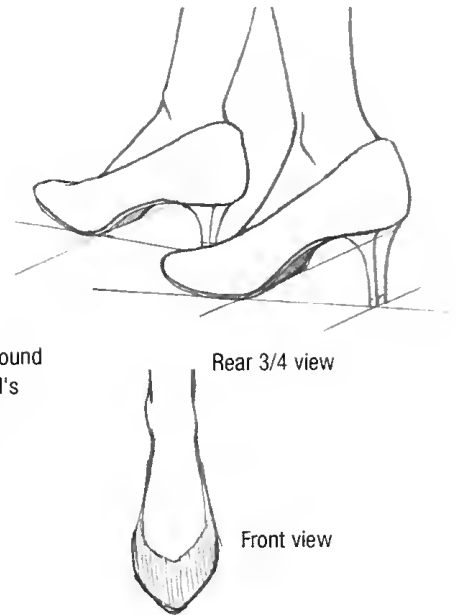
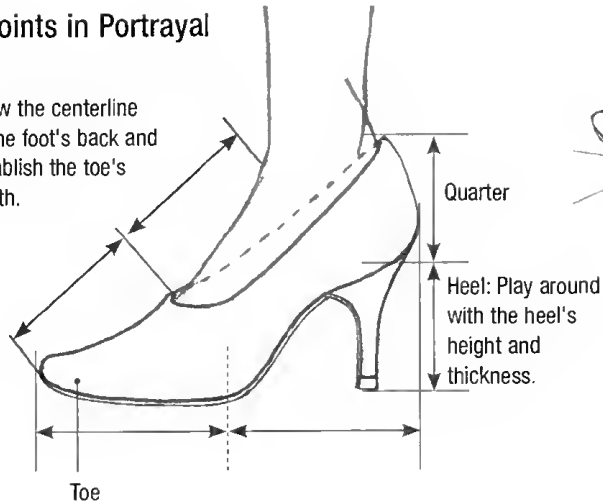


## High-heeled Shoes



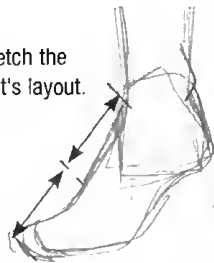
### Key Points in Portrayal

Draw the centerline of the foot's back and establish the toe's depth.



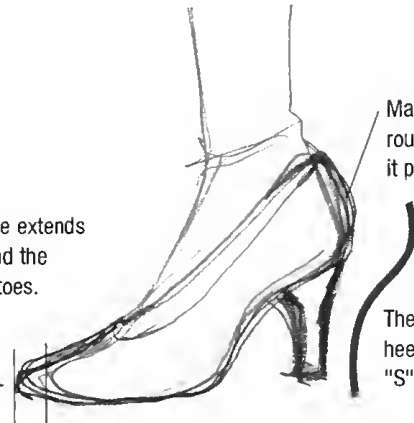
### Sketching Tips

Sketch the foot's layout.



The shoe's toe extends slightly beyond the foot's actual toes.

Make the toe narrow to the degree that it does not become pointy.



Make the quarter rounded and have it protrude.

The quarter and heel should form an "S" silhouette.

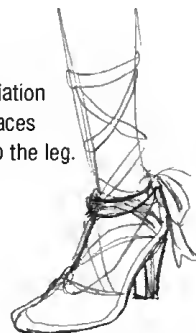
## Assorted Heeled Shoes

### Shoes with Enclosed Toes



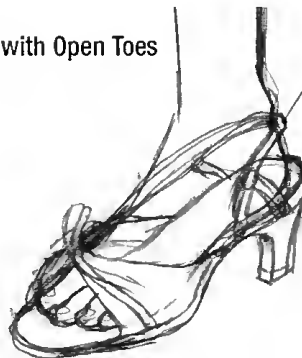
Wedge

This variation shows laces going up the leg.

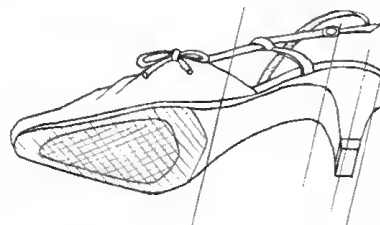


These open-toed sandals have no rear strap.

### Shoes with Open Toes



Because no part of the vamp holds down the toe, the shoe requires a back strap.



## Boots

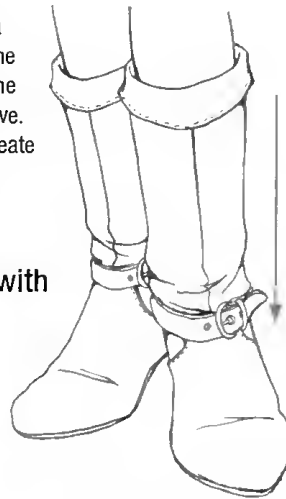


### Sketching Tips

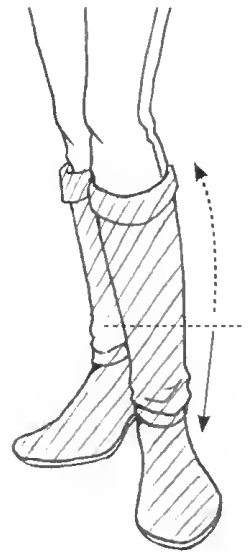


This line defines a cross-section of the leg according to the angle of perspective. It allows you to create the boot's top.

### Play Around with the Forms

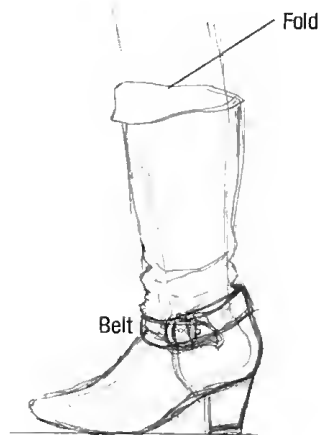


Leave the length alone but widen the ankles to create scrunch boots.

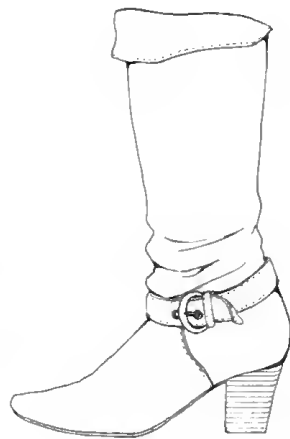


Keep the narrow ankles to maintain the fitted boot look, but lengthen the boot.

Simplify the toes of the feet and sketch the boots' outlines.

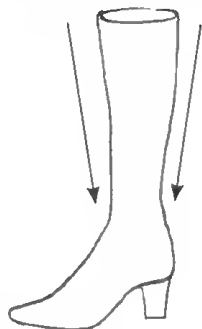


This design features a fold at the top and a belt around the ankle.

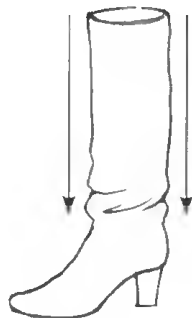


## Assorted Boots

### Differences in Form



**Fitted boots:** These boots taper as the eye moves from the top to the ankle. They adhere to the leg's natural form.



**Scrunch boots:** These boots retain a relatively uniform width from the top to the ankle.

### Differences in Length



**Above-the-knee boot:** This boot extends above the knee.



**Knee boot:** This ends just below the knee.



**Mid-calf boot:** This boot extends to midway between the knee and the ankle.



**Ankle boot:** This boot rises to around the ankle.



## Chapter 3

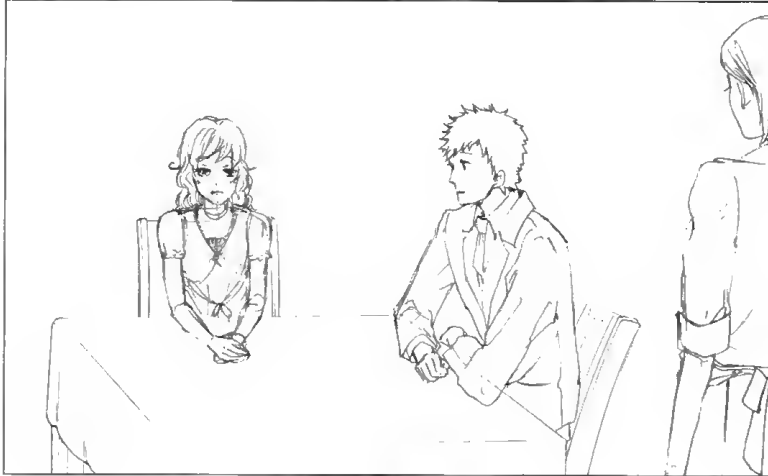
# Letting Props Narrate a Scene



# What Is Meant by "Props Narrating a Scene"?

Placing dishes and utensils on a table or a motorcycle or car on a road tells the reader at a glance where the character is and what he or she is doing. The prop explains the character's situation.

## • Indoor Scene



In the panel to the left, the characters are merely present. The scene is unclear to the reader. They could be waiting for a meal or waiting for someone else to arrive.



But, if the artist has clearly included food and drinks, now the reader immediately realizes, "Ah hah! It's a dinner scene."



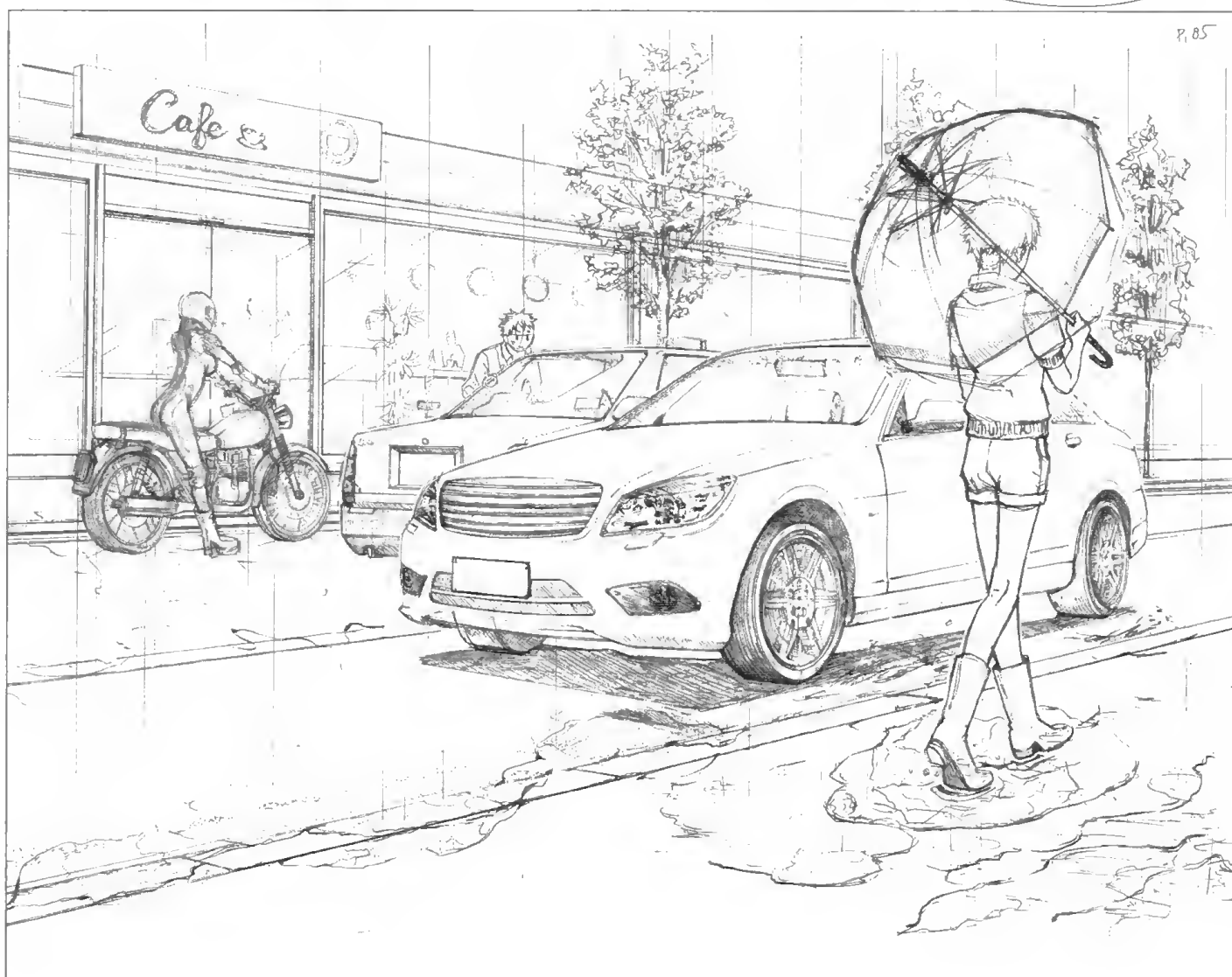
# • Outdoor Scene



This panel shows a street scene and a person. There is no sense of people inhabiting the space. It has the feel of a ghost town. The woman seems more like a shadow than a person.



Now the scene includes a motorcycle and cars, and the woman holds an umbrella. The panel now feels alive. Props imbue a composition with life.



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# Sketching Characters Drinking

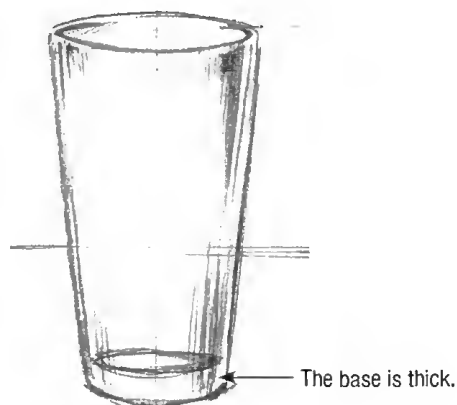
## Drinking Glasses



The girl tilts the glass, making the base visible.

This section teaches how to draw glasses, cups, mugs and other drinking vessels held in the hand.

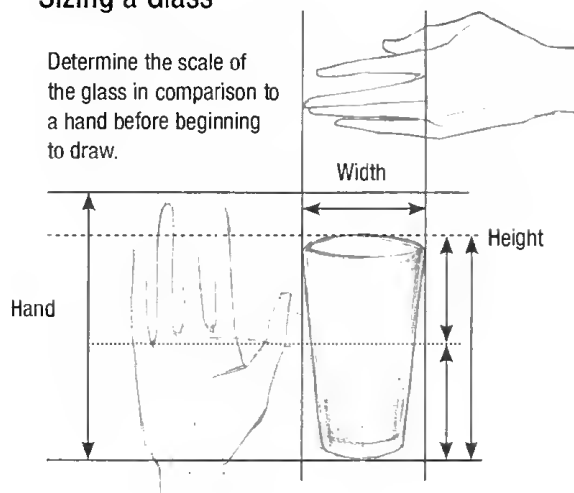
The rim and the thickness of the glass's base become important when drawing a thin glass.



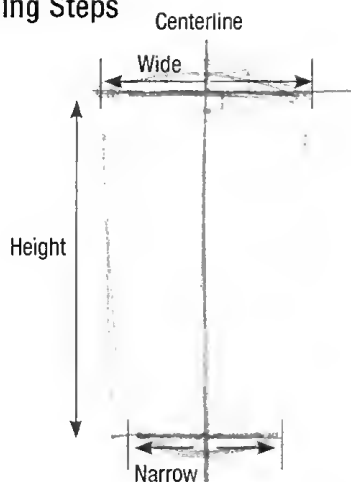
The base is thick.

## Sizing a Glass

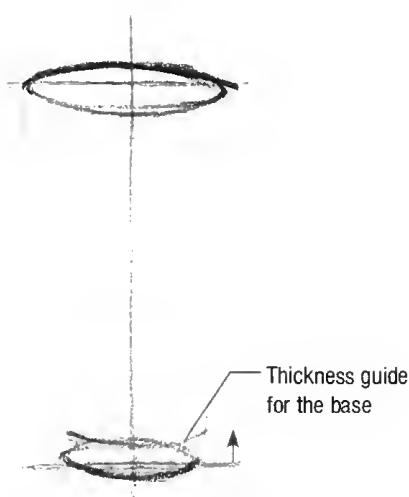
Determine the scale of the glass in comparison to a hand before beginning to draw.



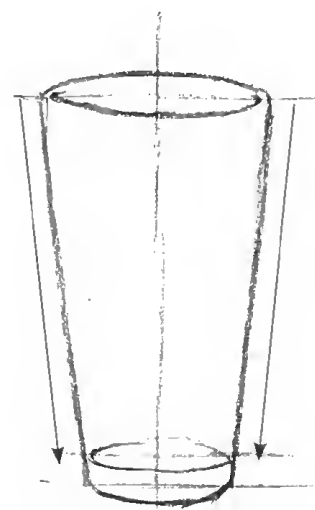
## Sketching Steps



① After sketching the layout and determining the glass's height, draw the right and left sides equidistant from the centerline.

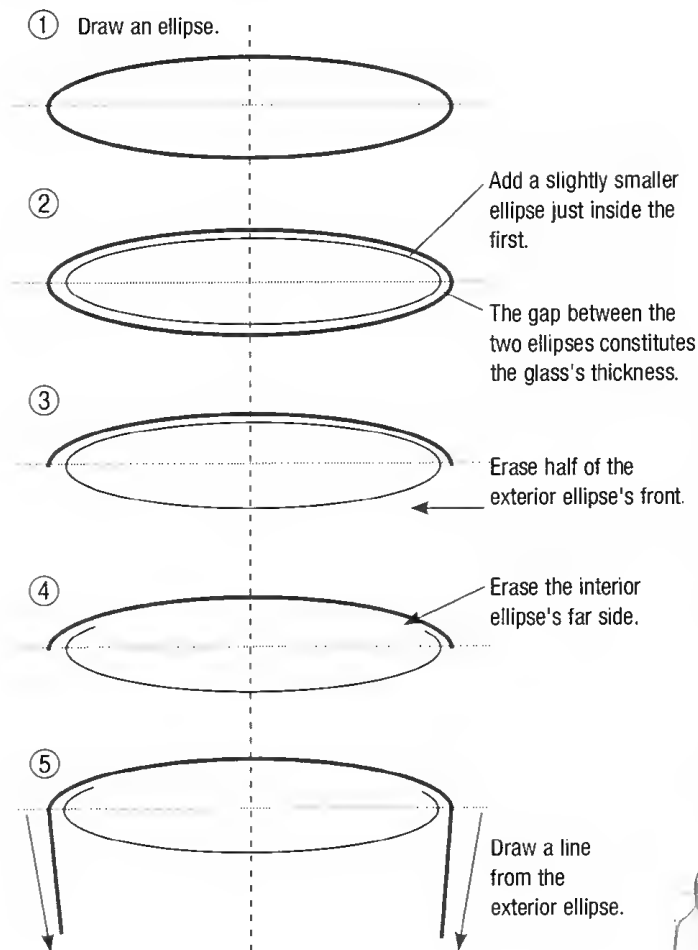


② Draw ellipses for the lip and base. After drawing the base, add a guide to establish the base's thickness.



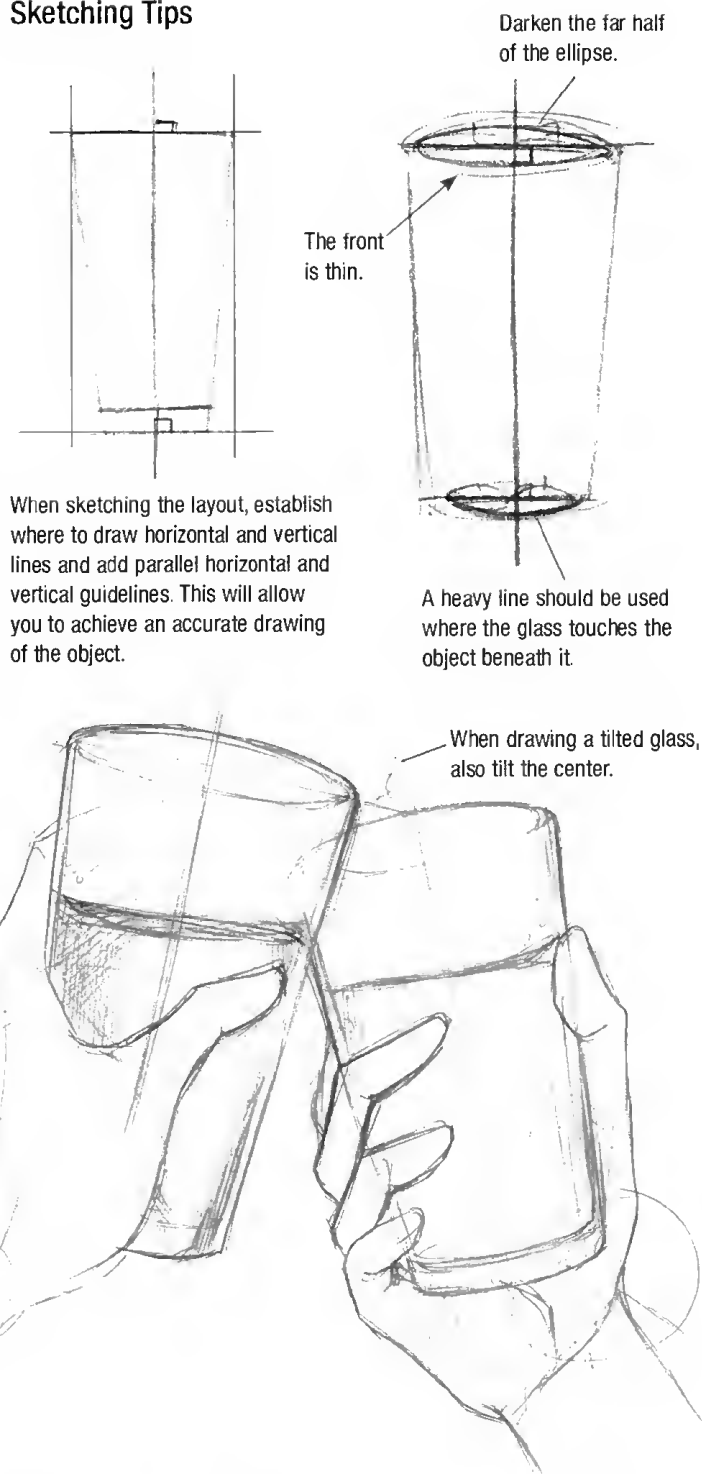
③ Draw lines for the sides and add an ellipse for the base to finish.

## Drawing Ellipses for the Lip



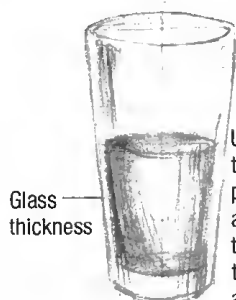
The rules of drawing interior ellipses dictate that drawing a second ellipse inside a first gives the illusion of thickness to a glass or cup.

## Sketching Tips



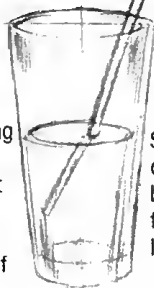
## Portraying Water and Other Liquids

### Portraying Liquids



Use hatching to create a play of light and dark that evokes the sense of a liquid.

### Portraying Light Refraction



Straws and other objects appear bent when viewed from outside a liquid.

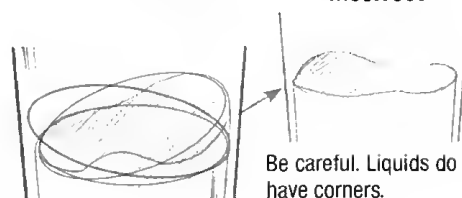
### Portraying Movement



Wavy lines form at various different angles on the liquid's surface.

Use wavy lines to create the illusion of agitated water.

### Incorrect



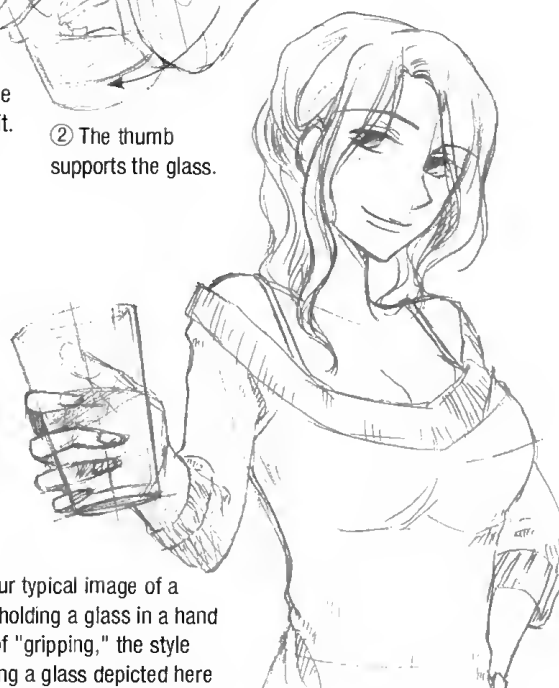
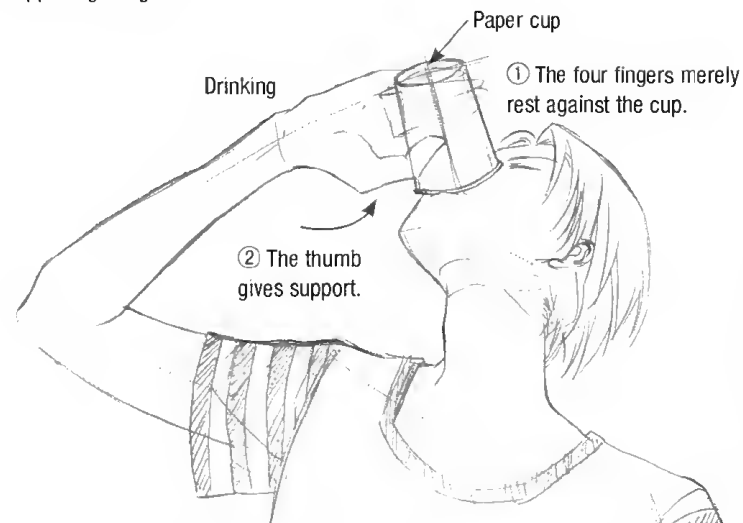
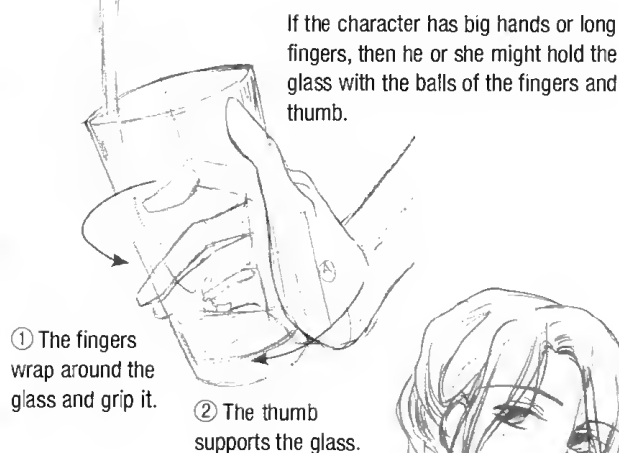
Be careful. Liquids do not have corners.

## Holding a Glass

### • Holding a Glass or Cup in One Hand



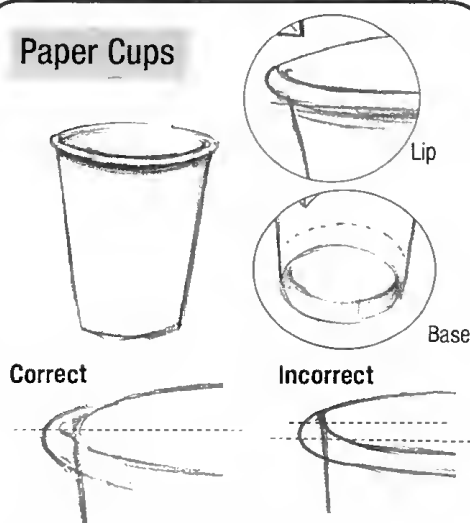
The character may hold the glass in one hand or two.



### • Holding a Glass or Cup with Both Hands



#### Paper Cups



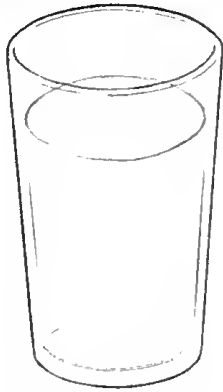
The lip's exterior ellipse and its interior ellipse share the same center.

Shifting the exterior and interior ellipses' centers so that they do not align results in a cup lip that does not look right.

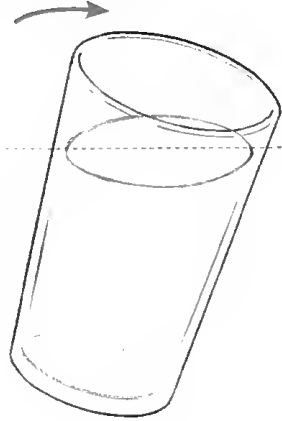
## Water Volumes and Glass Angles

Scenes of a character drinking often call for a liquid to be present in the glass. If the glass is tilted, the liquid will shift.

### Full of Water

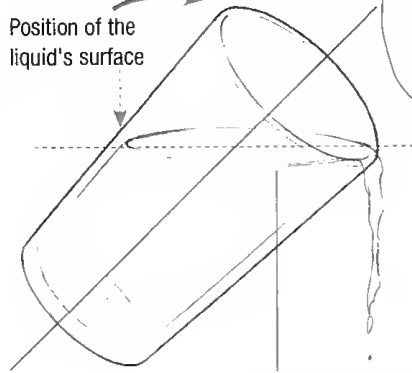


Slightly tilted



If the full glass were tilted any further, the liquid would spill out.

Position of the liquid's surface

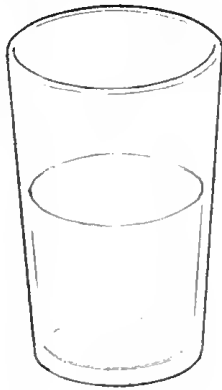


If the glass is full, then the glass does not need to be tilted much to drink from it.

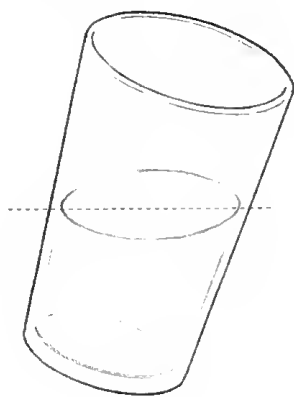


When the water spills out of the glass, its surface becomes virtually horizontal. The center of the ellipse creating the water's surface almost matches that of the cup's lip.

### Half-Full of Water

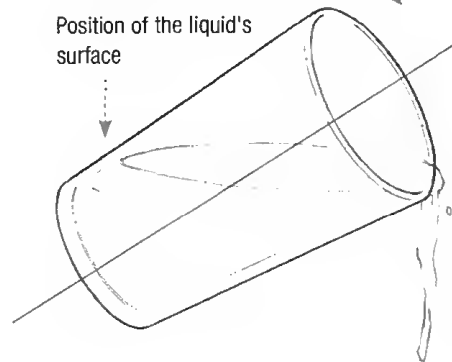


Slightly tilted

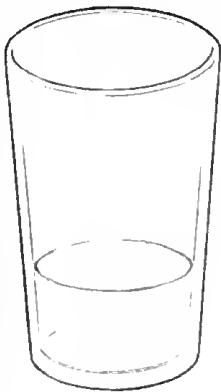


If the half-full glass were tilted any further, the liquid would spill out.

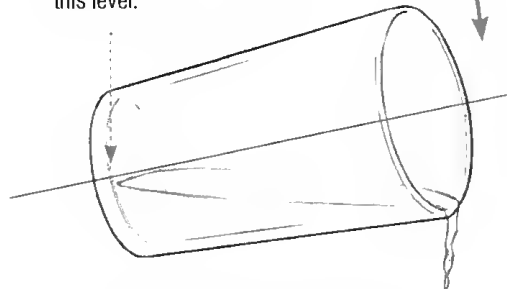
Position of the liquid's surface



### Small Amount of Water



The position of the liquid's surface sinks all the way to this level.



If the glass with a small amount of water were tilted any further, then the liquid would finally spill out.

When a glass contains hardly any liquid, the character has to tilt the glass until it is almost horizontal and must raise his or her head to drink.



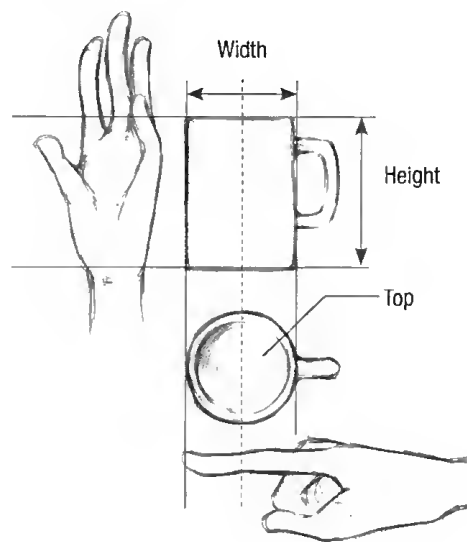


## Mugs



Mugs are essentially tubes with handles. Include a lip on the mug.

### Sizing a Mug

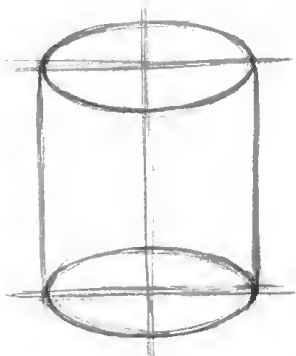


### Sketching Steps

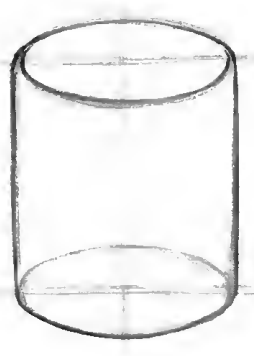
#### Sketching a Mug



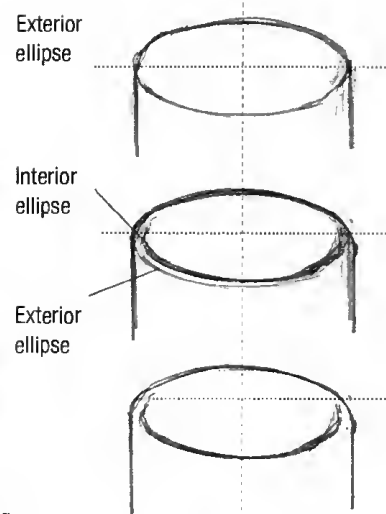
① Produce an overall layout of the mug.



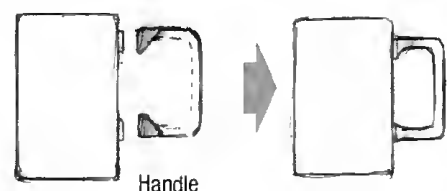
② Draw the central axes and sketch the ellipses. Take care to ensure that the tube's sides are parallel.



③ Follow the rules of drawing interior ellipses to finish the mug.



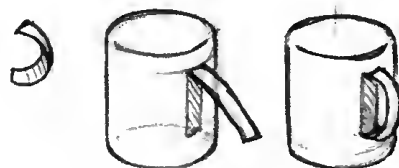
### Sketching Handles



Mug

Handle

Both the mug and its handle form rectangles.



Imagine that you are attaching tape to the mug. Now you see that the handle forms a rectangular shadow against the mug.





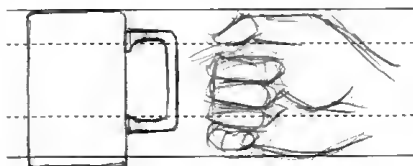
The mug's rim hides the girl's nose tip.



Draw the centerline according to how the mug is tilted.

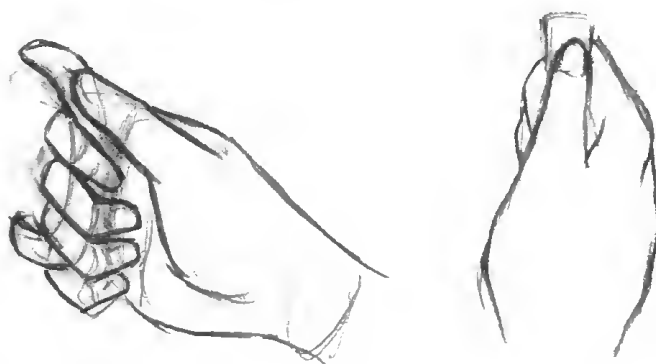
Include the mouth and nose when sketching a character drinking from a virtually frontal view.

### Hand's Appearance When Grasping a Mug



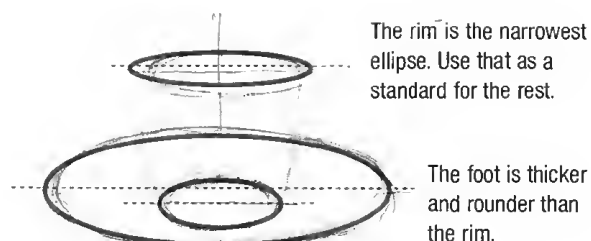
Even small mugs are about as tall as a person's fist is wide. The handles are generally able to fit two to three fingers.

Planning the pose out with thumb sketches will solidify your image and make it easier to draw.

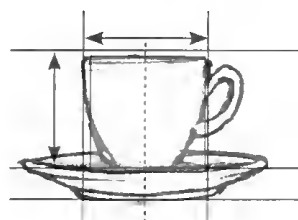


## Coffee Cups and Teacups

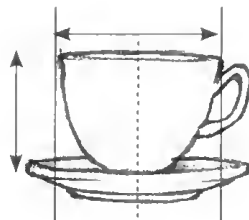
Use ellipses of different sizes and angles to describe the cup's rim, foot, and saucer.



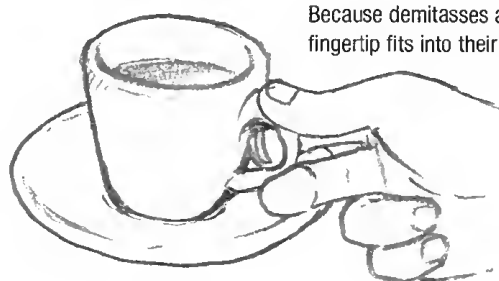
## Demitasses and Coffee Cups



Demitasses are small and will fit into a square.



Coffee cups are wider than they are tall.

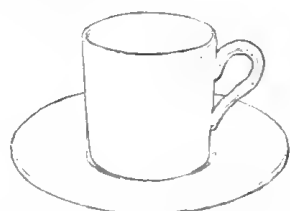


Because demitasses are tiny, only a fingertip fits into their handles.



Coffee cup handles are large enough for the fingers to get a firm grasp.

## Coffee Cup



Coffee cups do not significantly taper from top to bottom.

## Teacup



Teacup rim and foot ellipses display dramatic differences in size. The cups are shallow, and their rims are expansive.

## Multipurpose Cups

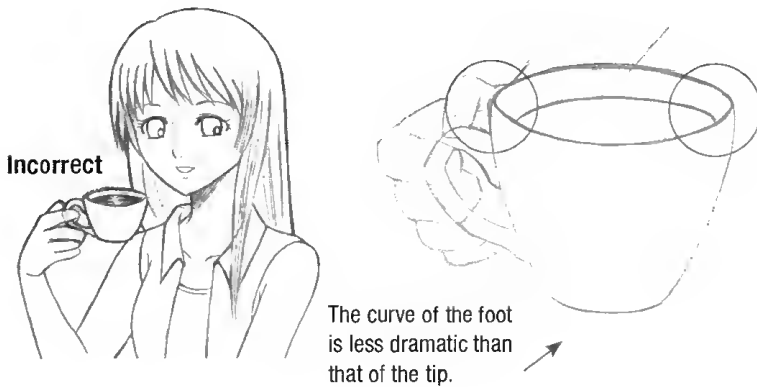


These cups may be used for both coffee and tea. Some do not have accompanying saucers.

## Common Pitfalls and Remedies

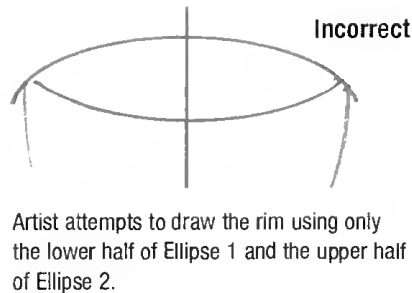
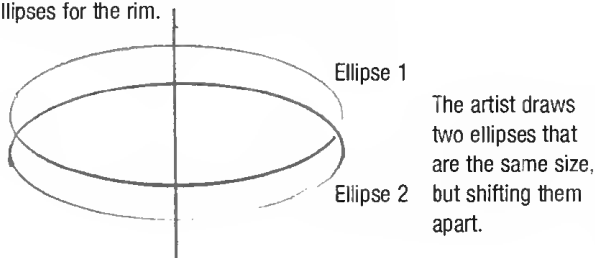
Two common pitfalls when sketching the rim of a cup is to make the sides pointy and to forget to add thickness to the rim.

Giving a character accurately rendered props draws out the character.

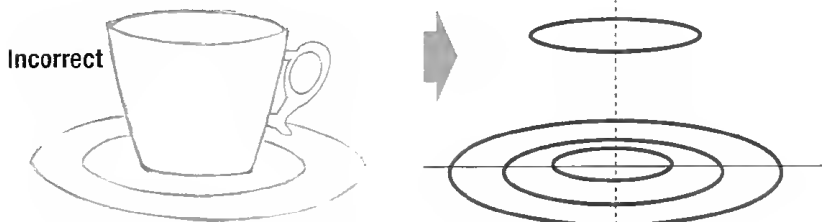


### Reasons for These Pitfalls

The artist attempts to produce cleanly drawn ellipses for the rim.

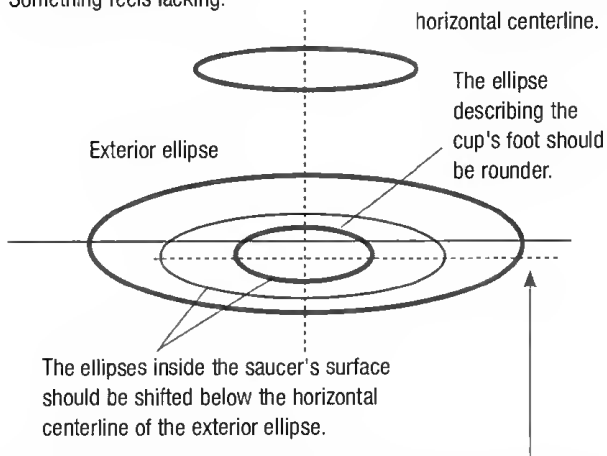


### Saucer Pitfall and Remedy



In this incorrect example, both the cup and the saucer look flat. Something feels lacking.

All of the ellipses forming the saucer are drawn along the same horizontal centerline.



Take careful note that the ellipse's appearance changes when the cup is resting on the saucer.



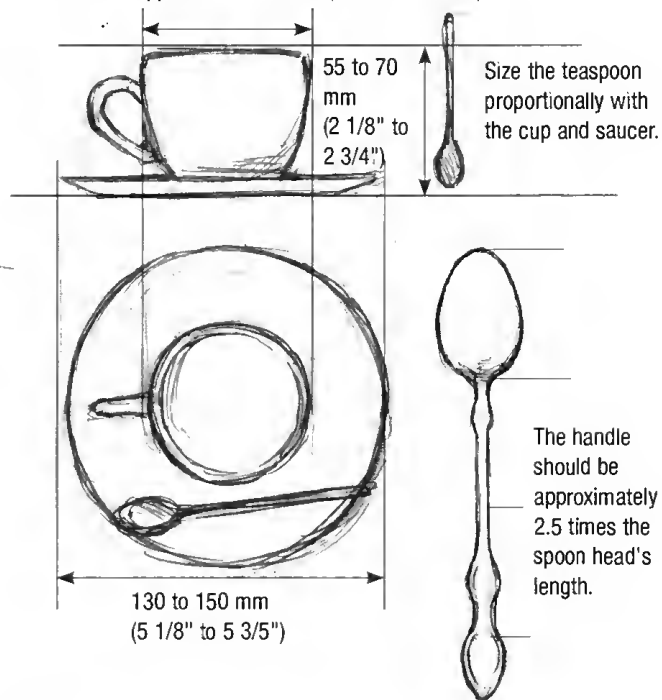
The key to correcting this mistake is to move the horizontal centerline of the foot's ellipse down a little.



The common dimensions are as follows. You may use them as guides.

## Common Dimensions

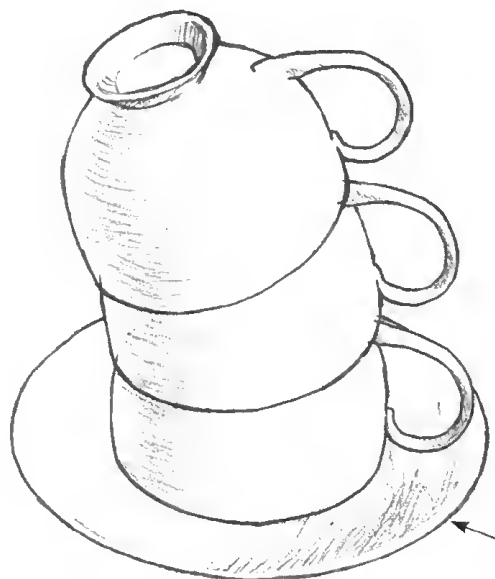
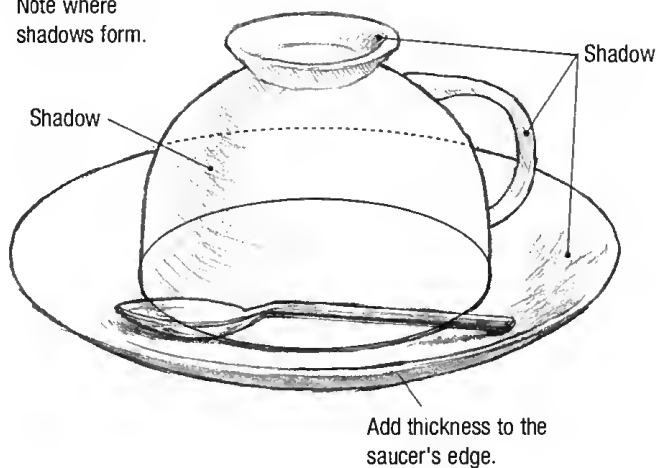
Approx. 70 to 90 mm (2 3/4" to 3 1/5")



## Texture

Note where shadows form.

Direction of light source

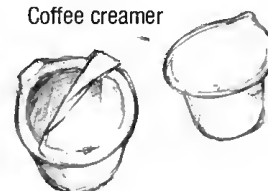


Creamer



Saucers curve inward, allowing shadows to form along their sloped faces. Add shading, leaving a narrow gap equidistant from the saucer's perimeter line. Have this gap follow the saucer's perimeter. This white gap allows you to give the saucer the illusion of volume.

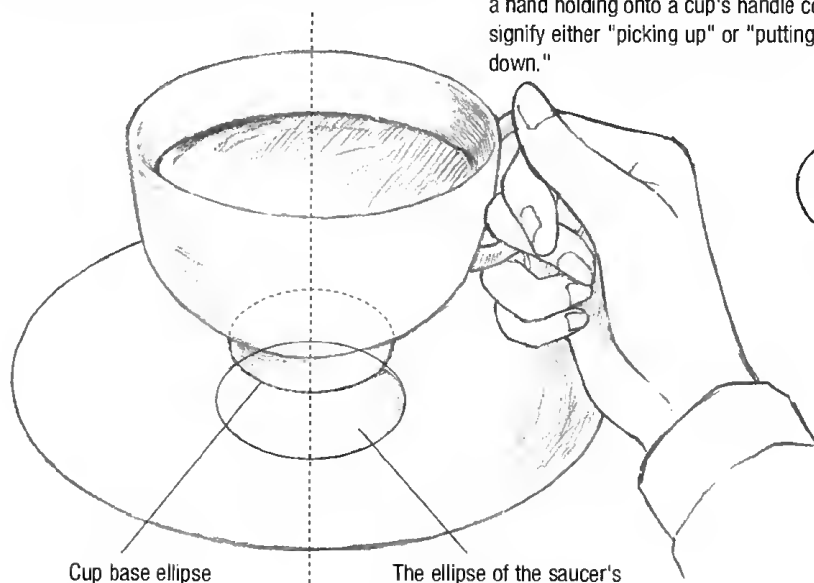
Coffee creamer



## Dramatizing Cups

### Picking Up and Putting Down Cups

As long as you do not draw a cup "spilling," a hand holding onto a cup's handle could signify either "picking up" or "putting down."

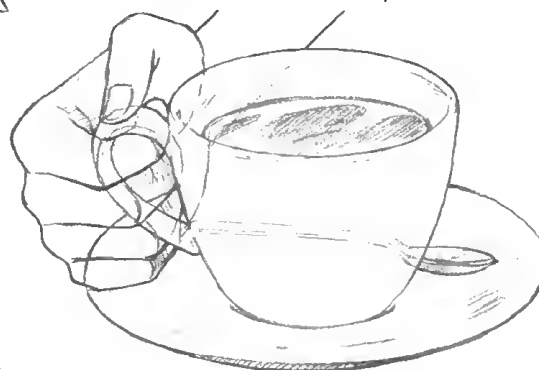


Cup base ellipse

The ellipse of the saucer's depression should be somewhat larger than the ellipse of the cup's base.

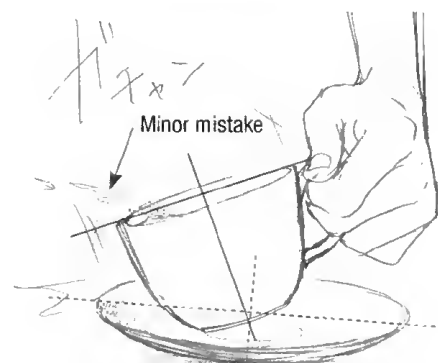
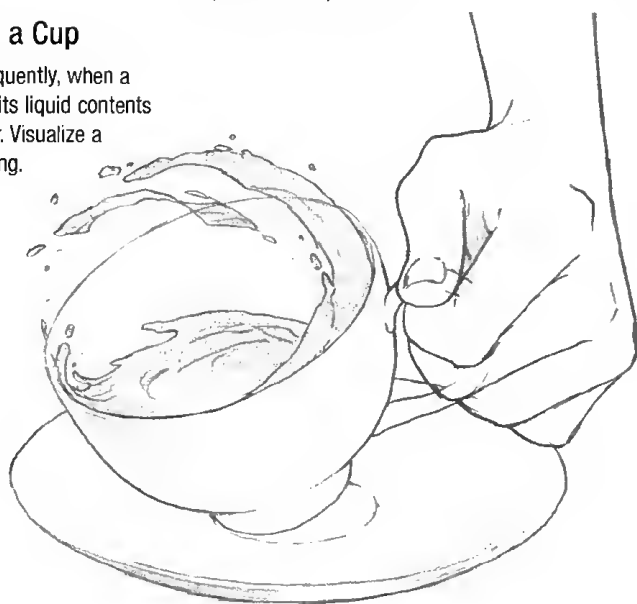


While both the cup below and the cup above have virtually the same ellipse describing their lips, the sketch above shows a hand from a distance, while the one below shows a close-up of a hand.



### Slamming Down a Cup

Cups are round. Consequently, when a cup is lowered rapidly, its liquid contents slosh around its interior. Visualize a whirlpool when sketching.

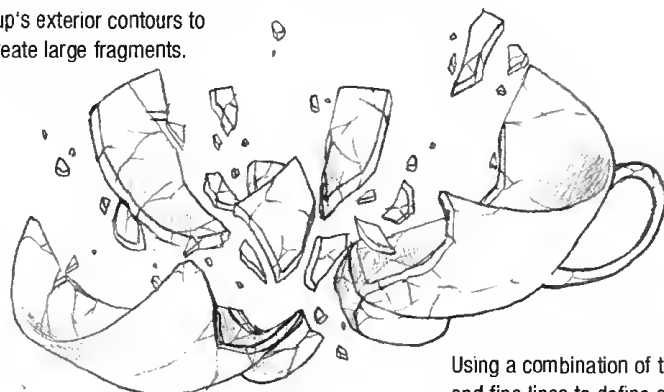


Tilting the centerlines of a cup and saucer creates the impression of being slammed down. The liquid contents should not spill out in straight lines.

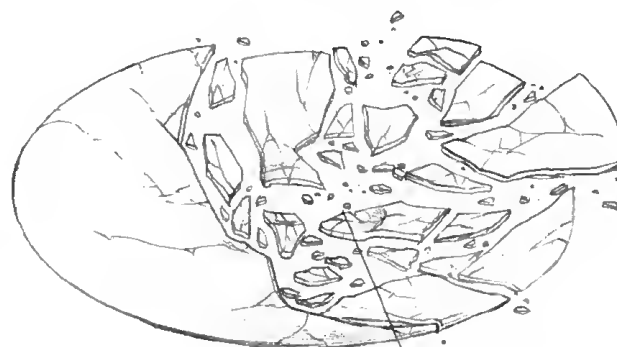
### Breaking/Shattering

Use curved lines and the cup's exterior contours to create large fragments.

Leave fragments that hint at the cup's original shape.



Using a combination of thick and fine lines to define cracks is effective.



The center is shattered into the tiny fragments, suggesting that something dropped on this section of the dish, causing it to shatter.

## "Yunomi"

(\*A handle-less mug used to drink hot tea)

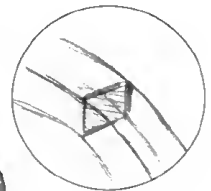


Draw the *yunomi* using a cylinder (tube) as its base form.

### Key Points in Portrayal

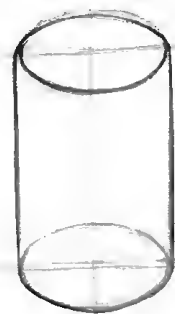


The *yunomi* has a foot.

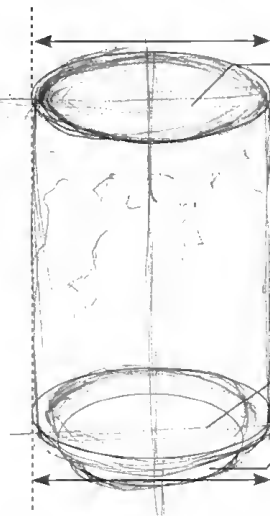


The base is round.

### Key Points in Sketching



Draw a cylinder according to the picture in your mind's eye.



Lip

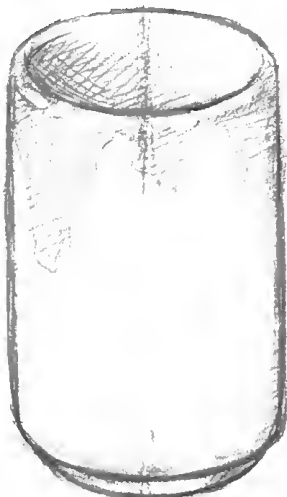
Use ellipses of the same size for the lip and the base.

Base

Foot

### Texture Differences

Modify the exterior contours.



Use straight lines for *yunomi* with smooth finishes.



Give undulating forms to the sides of rough *yunomi*, like the one above.

### Common Styles



Cylindrical



Barrel-shaped



Bowl-shaped

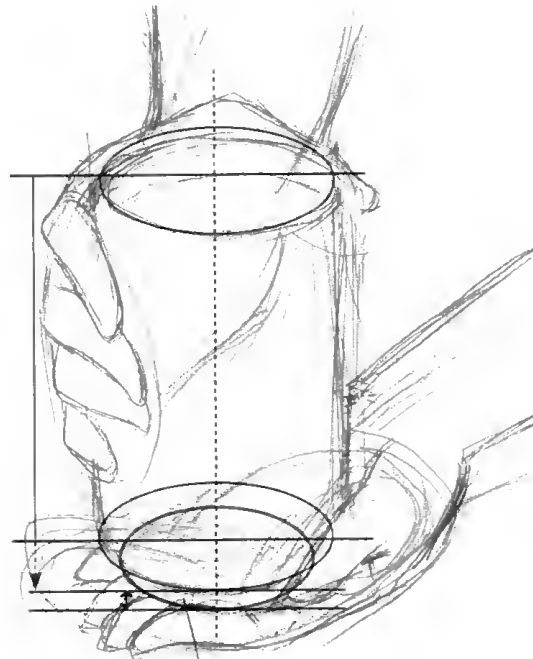
To create a *yunomi*, take a cup, remove the handle, and add a foot.





## Holding a *Yunomi*

### Using Two Hands



Use your eye to judge  
how tall to make the foot.

This is the basic way to hold a *yunomi*.  
The drinker positions one hand  
underneath the *yunomi*'s base.

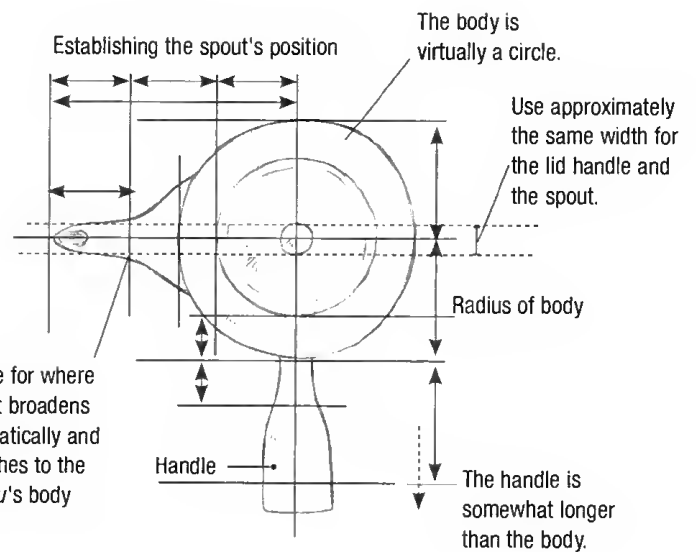
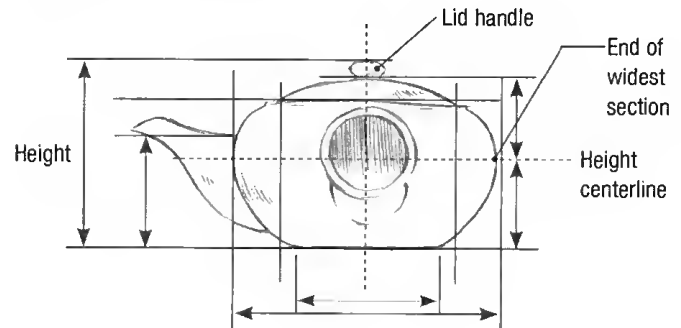
### Using One Hand



## Kyusu

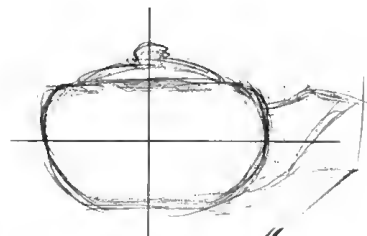


### Key Points in Portrayal

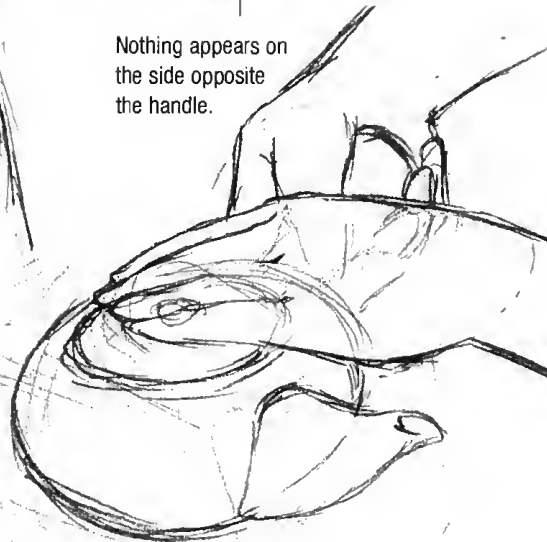


Draw the spout and the handle perpendicular to one another.

Guide for where spout broadens dramatically and attaches to the kyusu's body

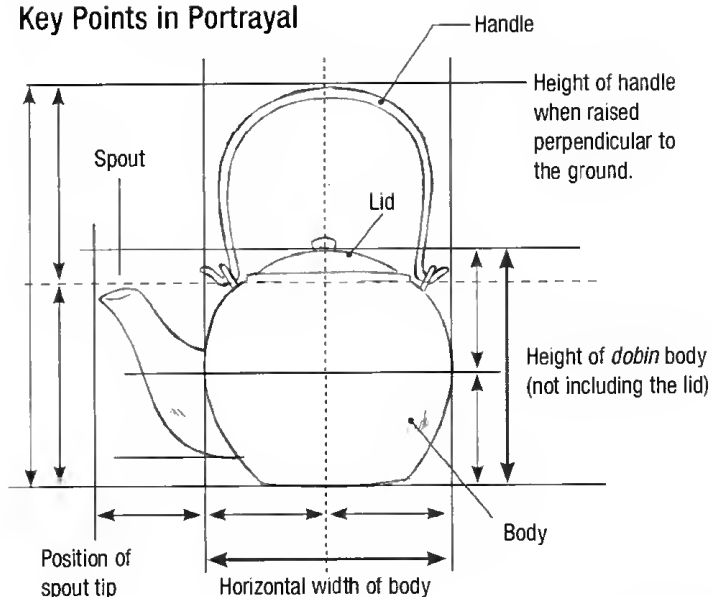


Nothing appears on the side opposite the handle.



Posture when pouring with a kyusu.

## Key Points in Portrayal

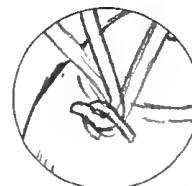


First determine the height and width of the *dobin*'s body (not including the lid) and establish its shape. Next, establish the spout's position.

Spout

The handle attachments at the *dobin*'s front and back and the spout's tip align neatly in a row.

The handle hooks through a loop attached to the body.



The handle oscillates.

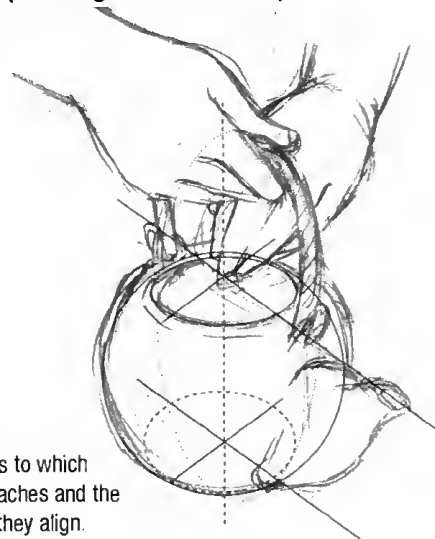


## Pouring with Two Hands (Holding Down the Lid)

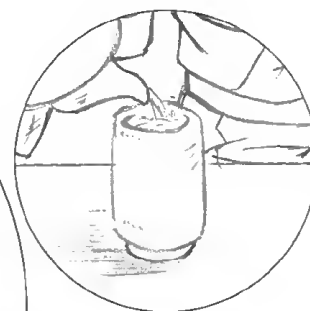
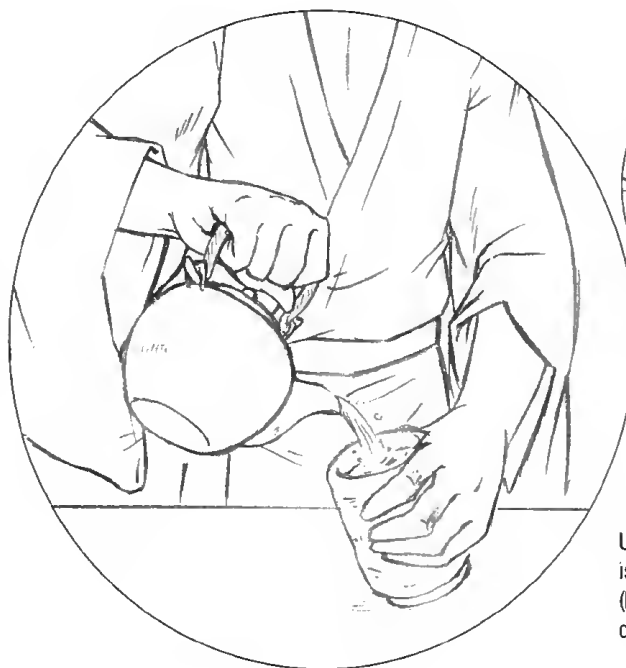


Sketch the layout. Imagine adding a horn to a circle.

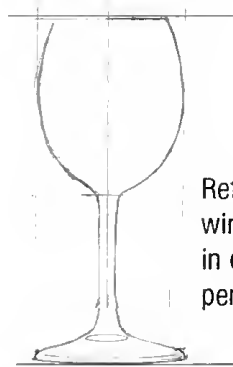
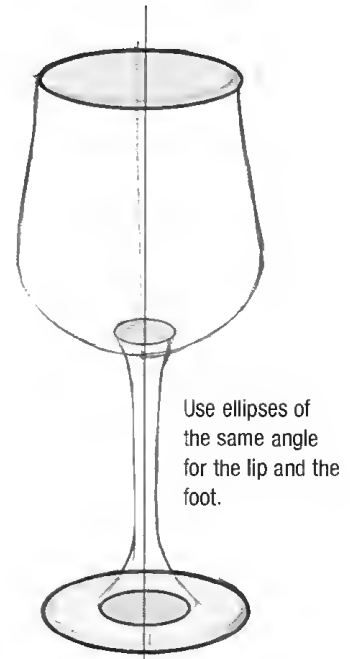
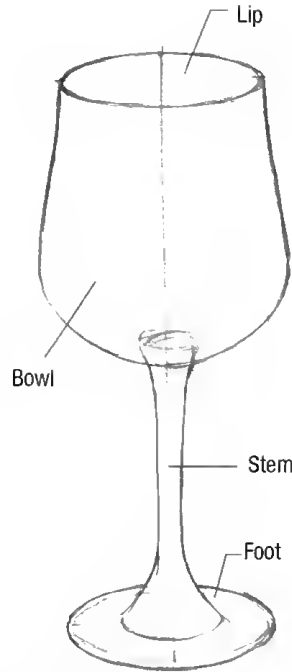
Draw the loops to which the handle attaches and the spout so that they align.



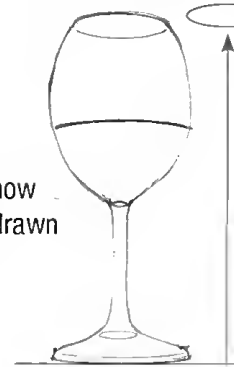
## Pouring with One Hand



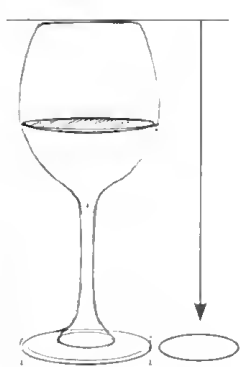
Unlike the *kyusu*, the *dobin* is used to pour *mugicha* (barley tea) and other cool drinks.



Ref.: These show wineglasses drawn in correct perspectives.



When the foot appears flat, the rim is naturally seen from a low angle.

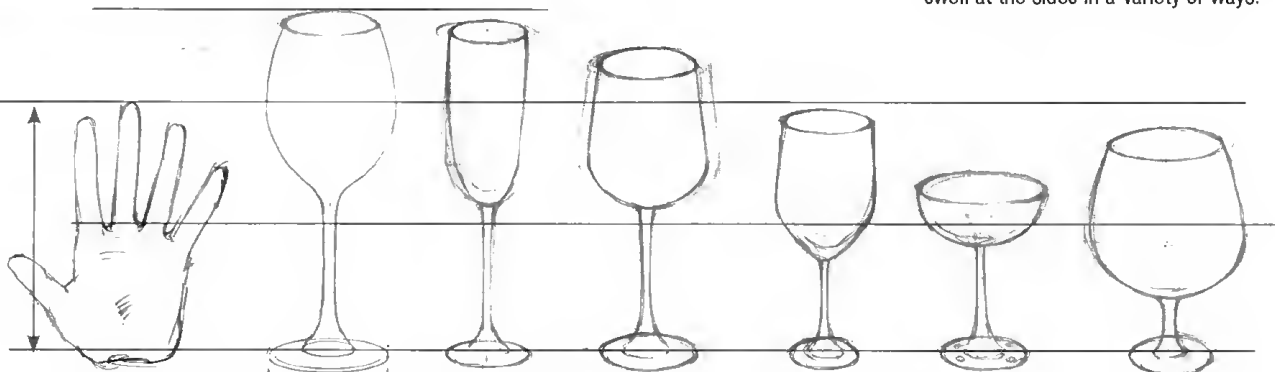


When the lip appears flat, the foot is naturally seen from a high angle.

The above shows a model drawing of a wineglass. The lip and the foot are drawing using straight lines.

## Common Stemware Shapes and Sizes

Stemware bowls come in a host of lengths and shapes, and the bowls of stemware swell at the sides in a variety of ways.



Human hand and palm

Multipurpose wineglass (red and white) and water glass

Champagne flute (Tall and slender)

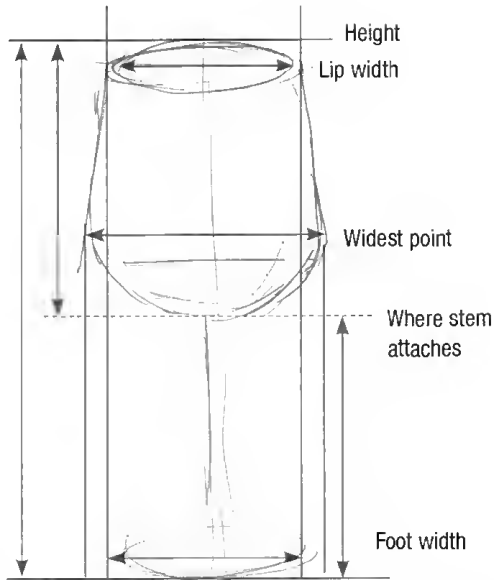
Red wine glass (Also non-alcoholic beverages)

White wine glass (Also non-alcoholic beverages)

Champagne saucer (Low and wide)

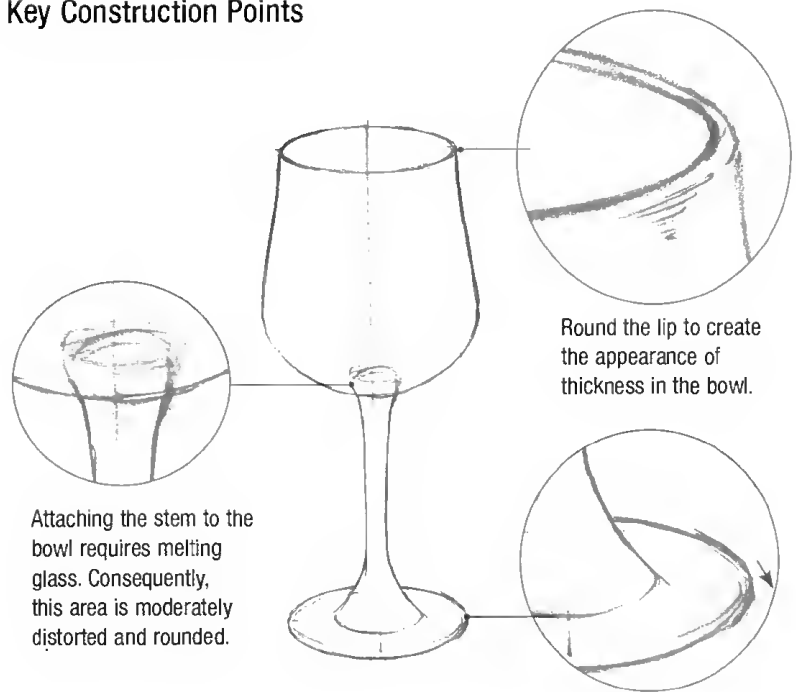
Brandy snifter

## Key Points in Portrayal



Make the foot approximately the same width as the glass's lip. (The foot is actually as wide as the bowl's widest point. However, drawing the foot so that it is as wide as the lip results in a more visually satisfying wine glass.)

## Key Construction Points



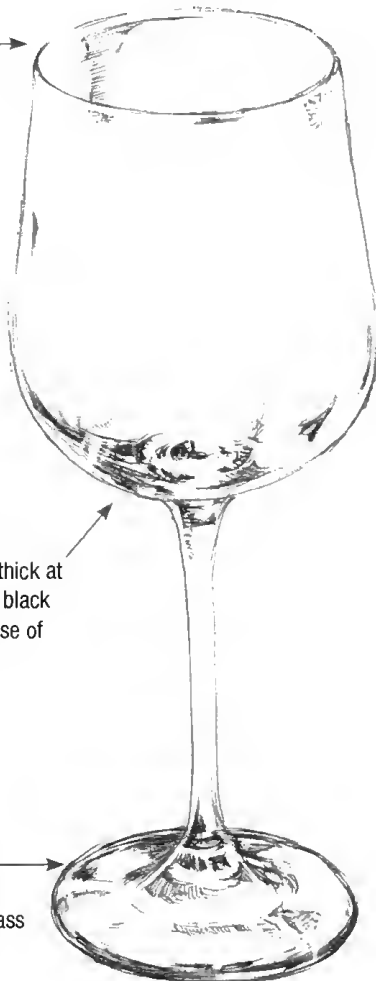
## Decide Which to Emphasize: The Form (Glass as a Material) or the Contents (Wine)

**Glass as the Emphasized Element** Modulate the exterior contour to portray light reflections. This creates the illusion of a glass texture.

Add lines to the lip here and there to suggest thickness.

The glass appears thick at this area. Use solid black to heighten the sense of contrast.

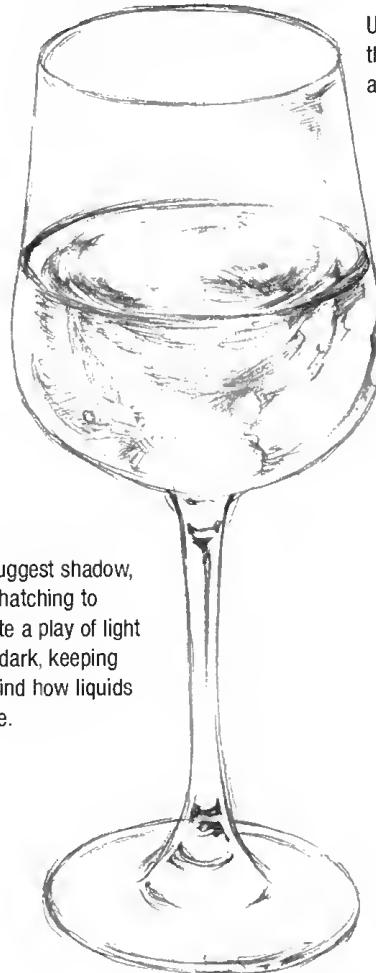
Accentuate the appearance of thickness and glass texture.



**Wine as the Emphasized Element** Use a uniform exterior contour, placing importance on portraying the wine.

Use double lines for the edges of the lip and foot.

To suggest shadow, add hatching to create a play of light and dark, keeping in mind how liquids move.



Stemware is often handcrafted, so it is perfectly acceptable for some misshapeness in the lip's ellipse or in vertical and horizontal lines.

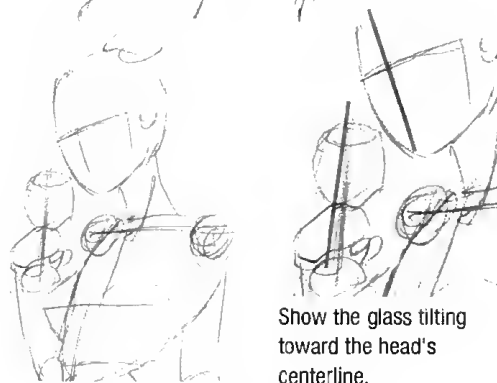
## Raising a Stemware Glass to the Mouth



Show the figure's neck tilting to create the sense of a head leaning forward.

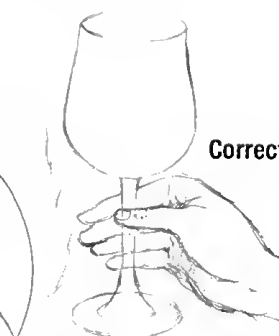


Draw the glass's centerline to give it an incline.



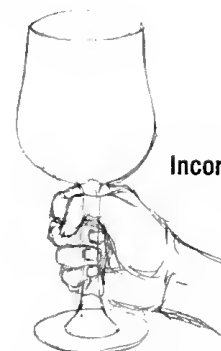
Show the glass tilting toward the head's centerline.

### Holding Stemware



Correct

Show the figure grasping the stem with four fingers on one side and the thumb on the other. This projects a sophisticated atmosphere.



Incorrect

The stem should not be grasped with a fist. (This makes it difficult to balance the glass as well as to drink from it.)

## Portraying Wine

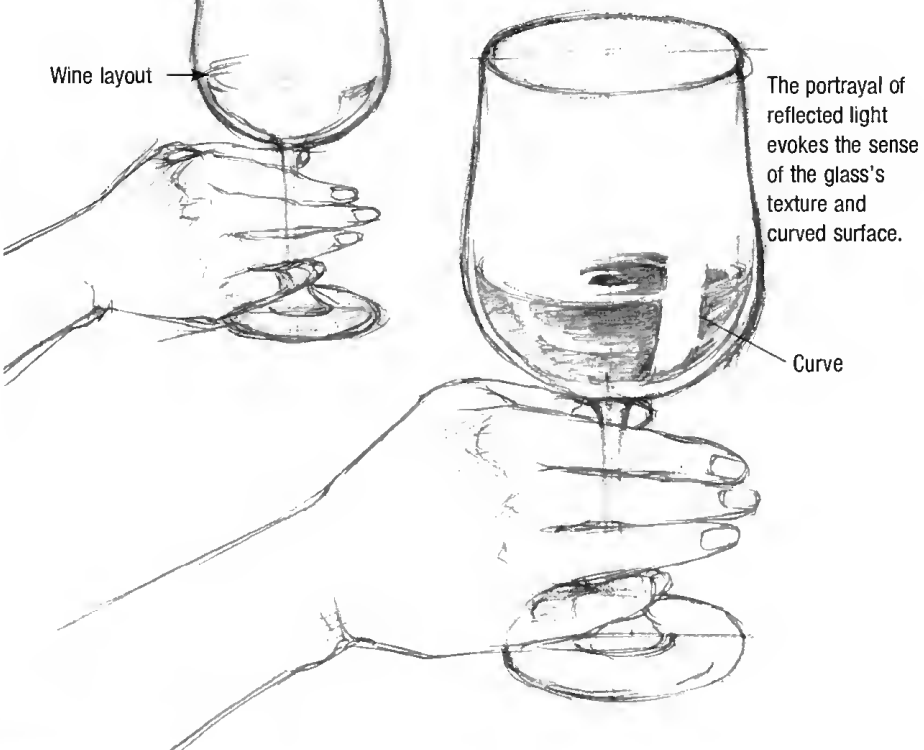


Use sinuous curves to portray movement in the wine. Maintain consciousness of the curved surface of the glass.

Empty glass



Draw the line denoting the wine's surface so that it adheres to the glass's curved sides. Let's look at how to portray a wineglass with an emphasized light source.

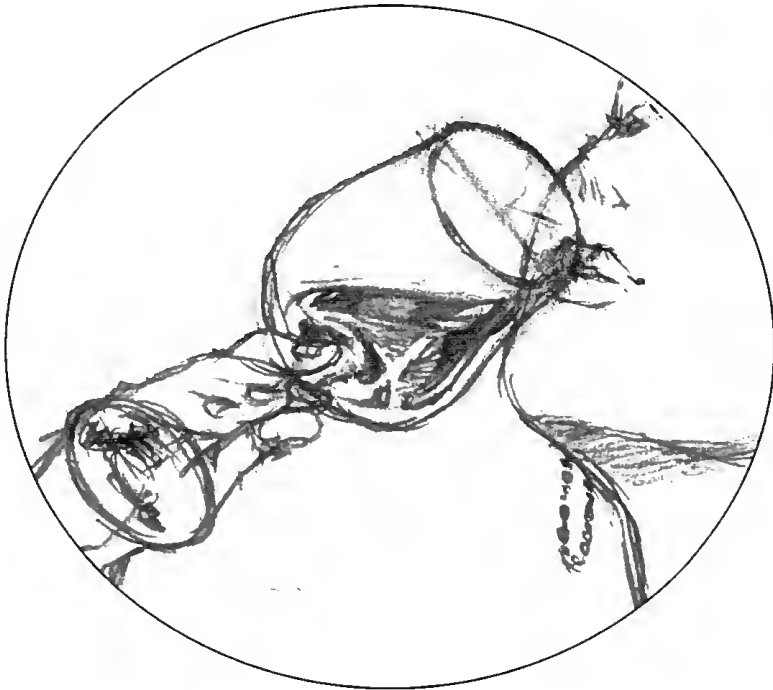
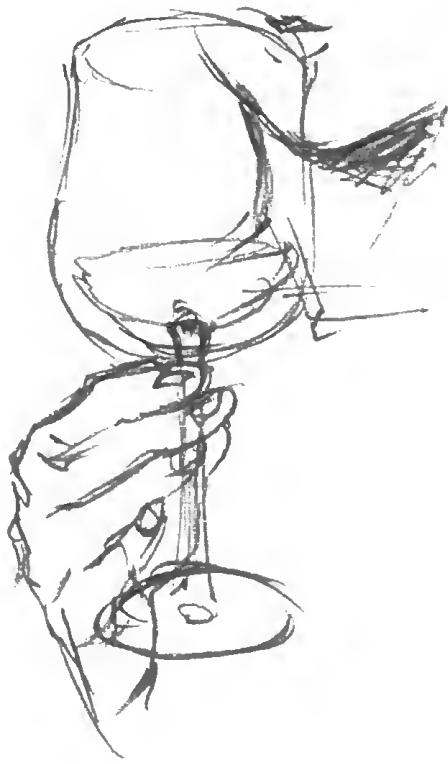


The above glass of wine rests stilly in place.

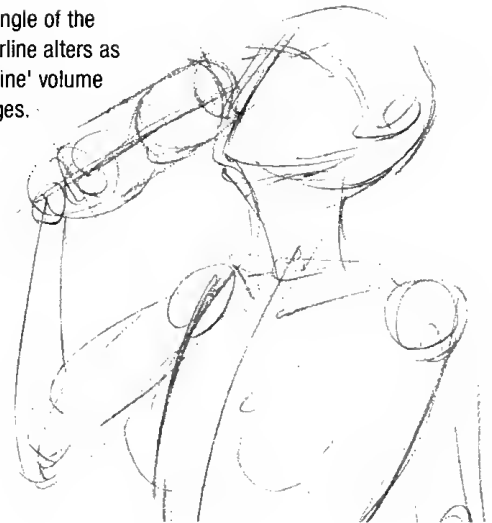


Light against the glass and the play of light and dark within the wine give the glass movement.



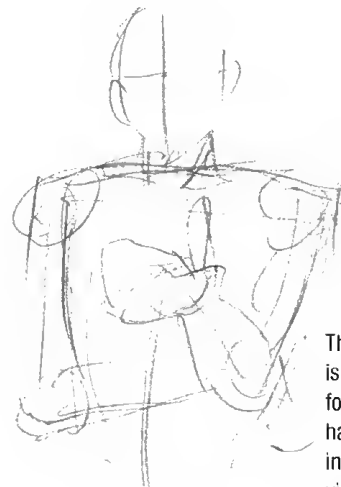
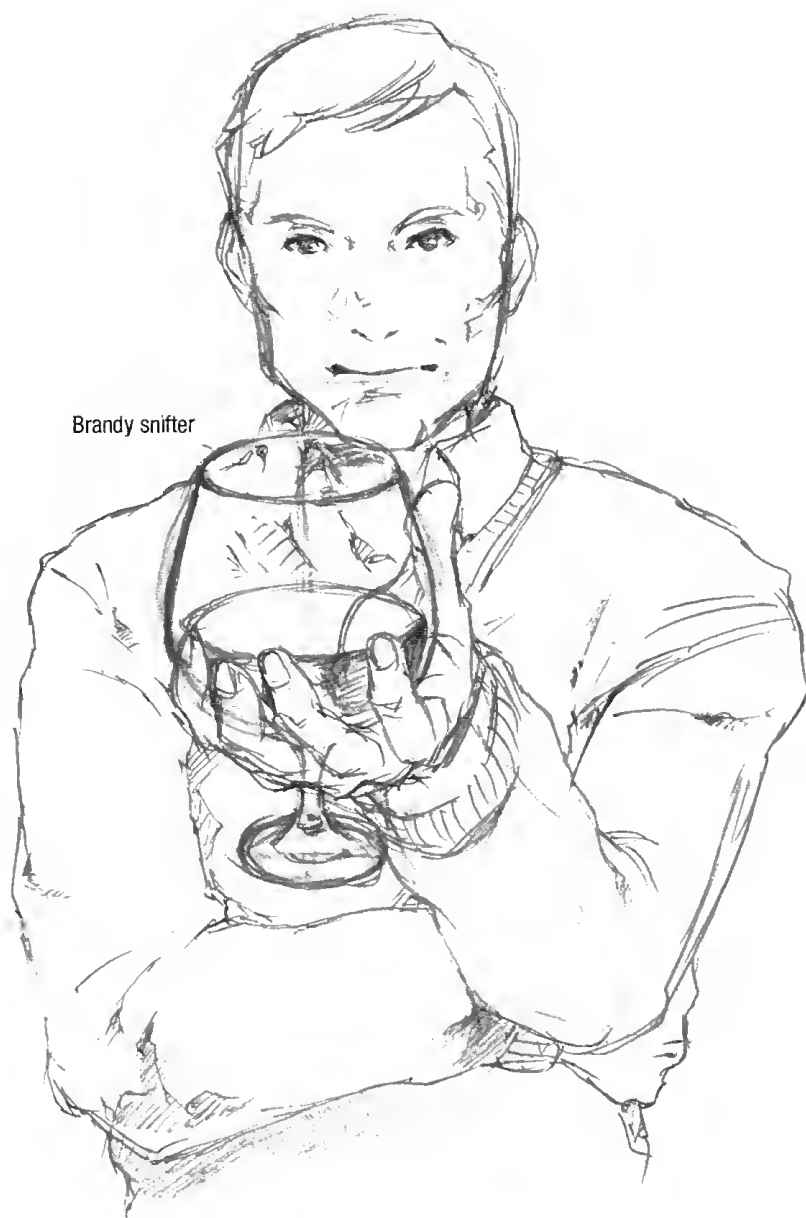


The angle of the centerline alters as the wine's volume changes.



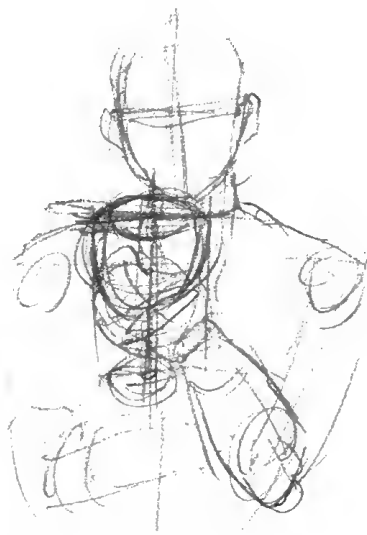


## Holding Out a Glass



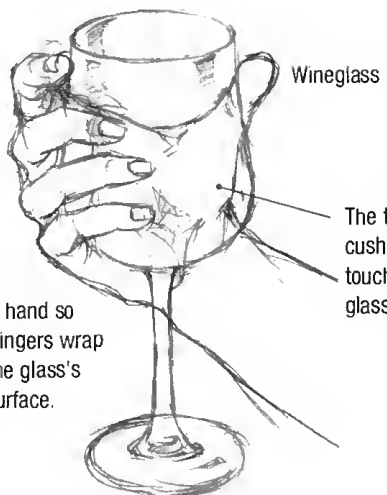
① Sketch the pose

The glass held forward is this composition's focus. Enlarge the hand so it matches in scale how big you visualize the glass to be.



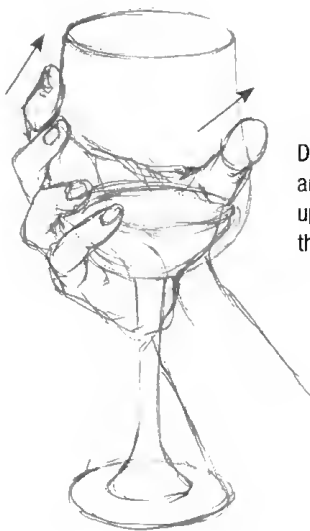
② Sketch the glass's layout.

## Grasping the Bowl



Draw the hand so that the fingers wrap around the glass's curved surface.

The thumb's cushion touches the glass.



Drawing the fingers angled with the fingers upward suggests that the glass is being lifted.



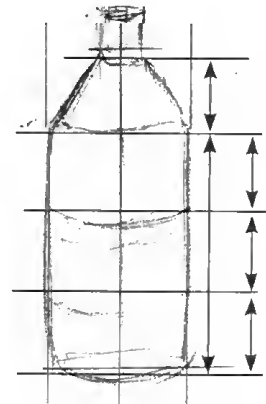
Showing the forearm touching the stem creates the illusion of a raised glass.

## Plastic Bottles and Beer Bottles

Combine a cylinder with a cone.

### Plastic Bottles

#### Key Points in Portrayal



Establish the position of the sloped sides.

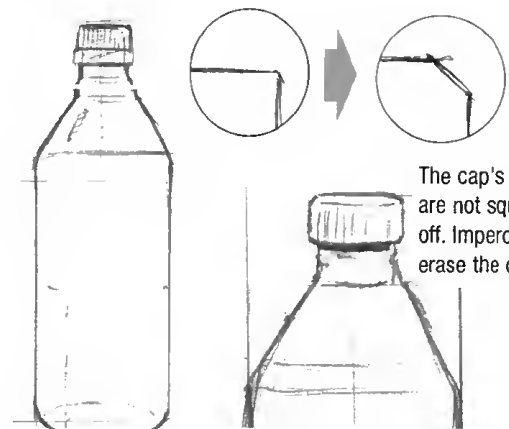
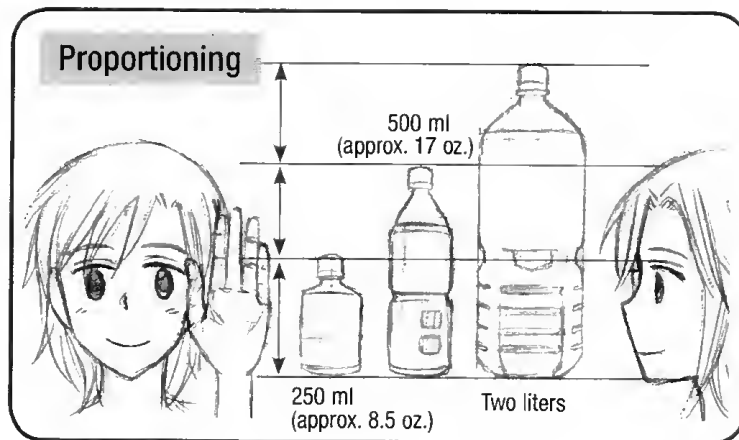


#### Opening the Cap

Align the fingers along the bottle's surface, vertically.



#### Tip! Cap Corners

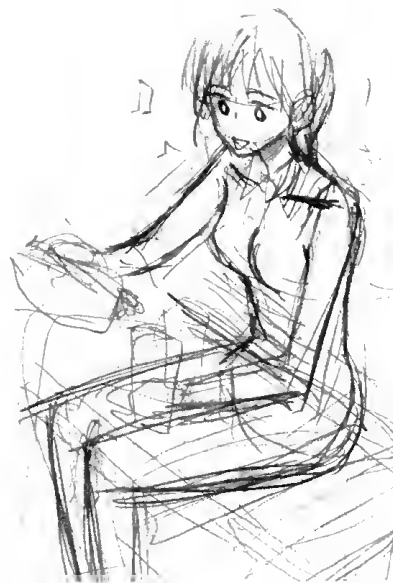


The cap's corners are not squared off. Imperceptibly erase the corners.

## Pouring



Draw the knuckles so that they align. The bottle should be tilted at the same angle.



## Drinking from the Bottle



Show the face tilting slightly upward.



In this side view, the plastic bottle is shown at a profile view. The composition is quiet and still.



## Beer Bottles

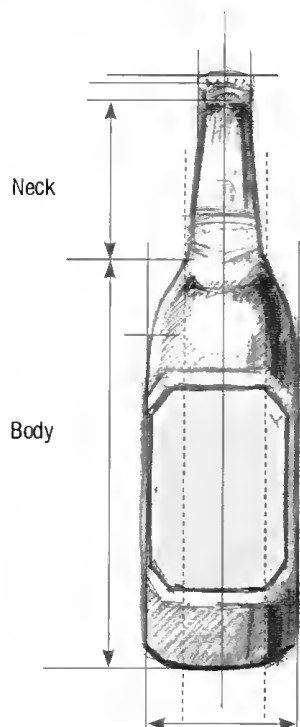


A character in normal spirits would pour a bottle, holding it tilted slightly upward.



However, a character feeling dejected might tilt the bottle until it lies virtually horizontal.

### Key Points in Portrayal



Neck



Shoulders: Where the neck and body connect

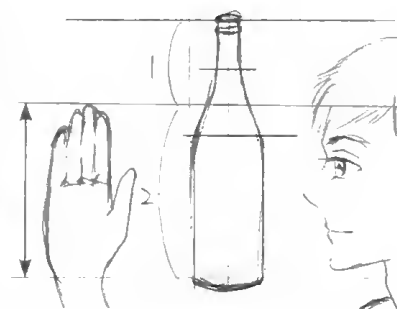
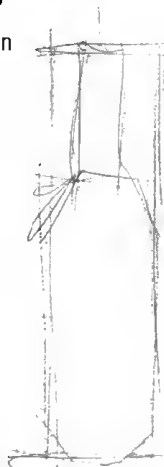


Body

This shows dark, medium, and light shades added using vertical and horizontal lines and hatching to evoke the sense of a curved surface. Note the effect of ordering the shades—light+dark+medium.

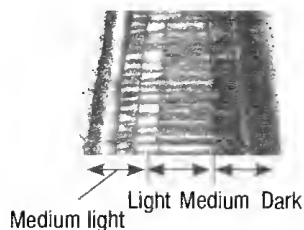
### Sketching Tips

Establish the slope in the shoulders while determining the widths of the neck and body.

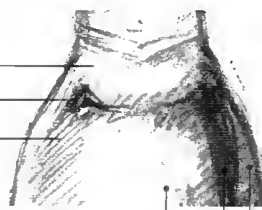


The above shows a comparison with the human head and hand. The bottle should be slightly larger than the hand.

### Portraying Texture



Light  
Dark  
Medium



Light Dark Medium



This bottle displays only a contrast of light and dark shades.



This shows a tinted bottle, creating a weak light-to-dark contrast.

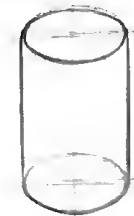
## Beer Mugs

### Sketching Steps and Tips

Attach an ear-shaped handle to a cylinder to create a beer mug. The distinguishing features are the thick lip and thick handle.



#### Capturing the Overall Shape



① A cylinder drawn as a standard solid constitutes the mug's base form.



② Draw a second ellipse inside the first leaving a noticeable gap to create the lip.

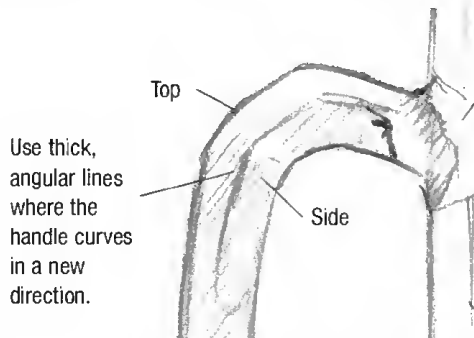


Roughly sketch the lip, which you previously composed as flat, as a three-dimensional object in perspective and determine the positioning and thickness of the handle, checking the proportioning.

④ Attach the handle above the base.

③ Establish how thick the foot will be.

#### Adding Final Touches to the Handle and Giving It Volume to Finish

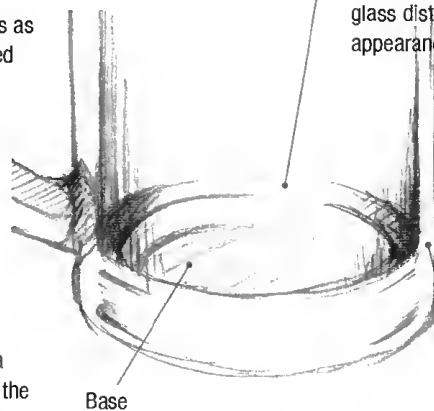


Use thick, angular lines where the handle curves in a new direction.

Clearly define the handle's top and sides. Use angular, rugged contours to evoke the sturdiness of thick glass.

Show this as a distorted ellipse.

This line is a reflection of the handle.



Base

This indicates how thick the foot is. The foot looks enlarged owing to the glass distorting its appearance.



The handle is attached by pressing a glass rod against the mug's body. Consequently, the handle spreads and swells slightly where it attaches.

Glass thickness

#### Assorted Beer Mugs



The lips, feet, and handles of all three are equally thick.



Metal mug



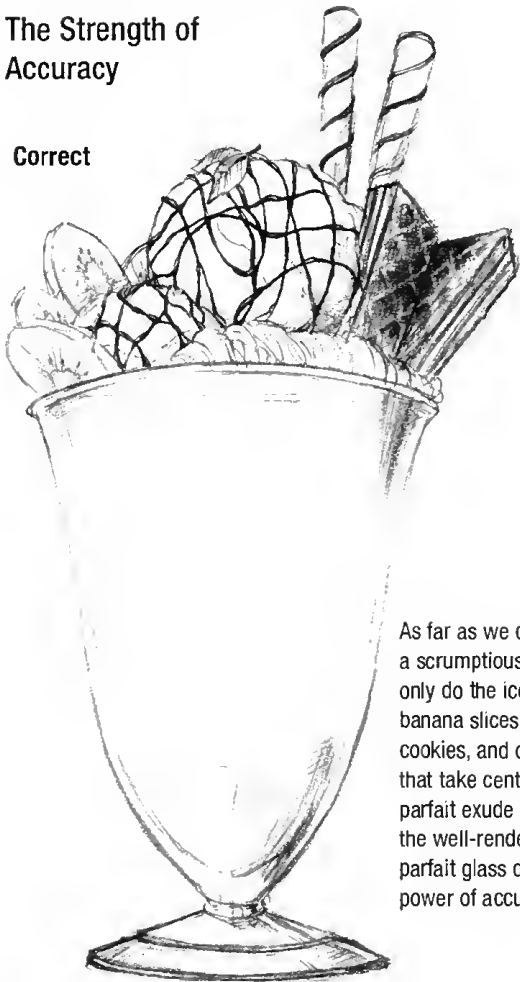
# Making Props Look Authentic

This section covers how to evolve your artwork from "precise" to "authentic" to developing your own style.

## Accuracy and Authenticity

### The Strength of Accuracy

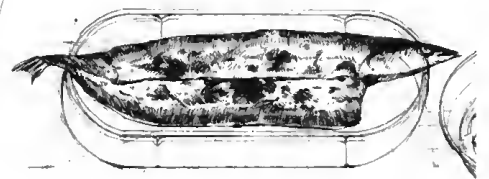
Correct



As far as we can see, this is a scrumptious parfait. Not only do the ice cream, the banana slices, the wafer cookies, and other treats that take center stage in this parfait exude exactness, but the well-rendered, simple parfait glass displays the power of accuracy as well.



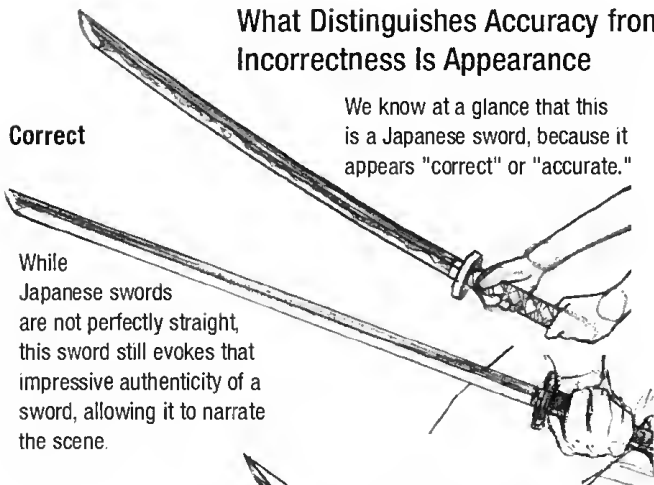
The foot appears awkward, and because of it, even though you spent so much effort drawing the parfait, it is all for naught.



If the fish above looks delicious, then that alone makes it an accurate portrayal. Accuracy also implies that an object has the "ability to appeal."

### What Distinguishes Accuracy from Incorrectness Is Appearance

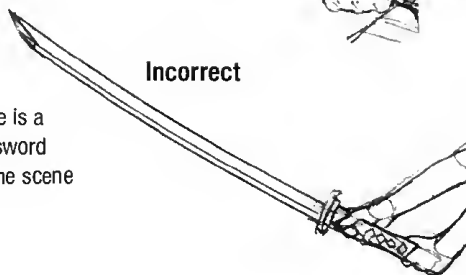
Correct



While Japanese swords are not perfectly straight, this sword still evokes that impressive authenticity of a sword, allowing it to narrate the scene.

We know at a glance that this is a Japanese sword, because it appears "correct" or "accurate."

Incorrect



The sword we see here is a sloppy portrayal. This sword blade fails to narrate the scene for us.

### The Power of Accuracy and the Ability to Exceed Accuracy



Here we see a carefully rendered champagne flute. The glass's texture and the sparkling wine contained within are authentically portrayed.



The flute itself is slightly misshapen and cannot be considered accurate. And yet, don't we still feel that the diagonal hatching portraying the glass texture and the liquid rendered using a contrast of shading evoke a sense of presence that makes us overlook the misshapen flute?

## Authentic Portrayal That Allows Narration

Do you draw glasses with wine in them or wine in glasses?



Here, the glass takes center stage over the wine it contains. Light and reflections on the glass constitute the primary elements.



Here, the wine takes center stage over the glass containing it. The composition shows off the wine.

## Using Portrayal Styles Effectively

Although you might be drawing the same subject matter, you will need to modify the portrayal to suit your goal.



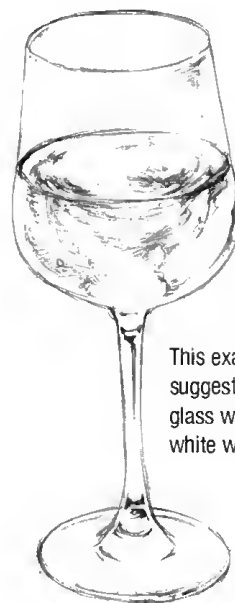
The goal of the above is a realistic portrayal.



The goal of the above is to show a colored-glass bottle.



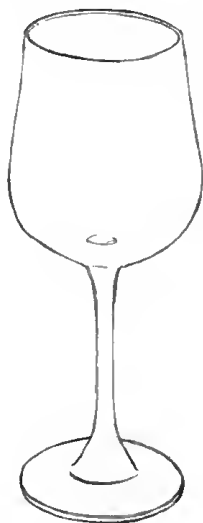
The goal of the above is to show a bottle.



This example suggests a glass with white wine.

## Empty Glasses

Even if multiple artists were asked to "Draw an empty glass," no two would produce the same drawing.



This glass is rendered solely using contour lines. This empty glass plays purely a "supporting role."



This glass hints at the thickness and weight of the glass.



This glass has an antique feel, displaying curved surfaces and evoking the sense of glass.



The goal of this glass is to portray the shine and glossiness of glass.

How you approach "authenticity" changes depending on your goal. Once you have achieved accuracy, the next step is to seek a style of your very own.



# Composing Cooking, Eating, and Dining Scenes

This section discusses props one finds in meal scenes.

## Pots and Pans

Pots and pans are combinations of large and small cylinders. Take careful note of the differences in width between the various rims and bases of the pans.

### Skillets



### Key Points in Portrayal

Straight region

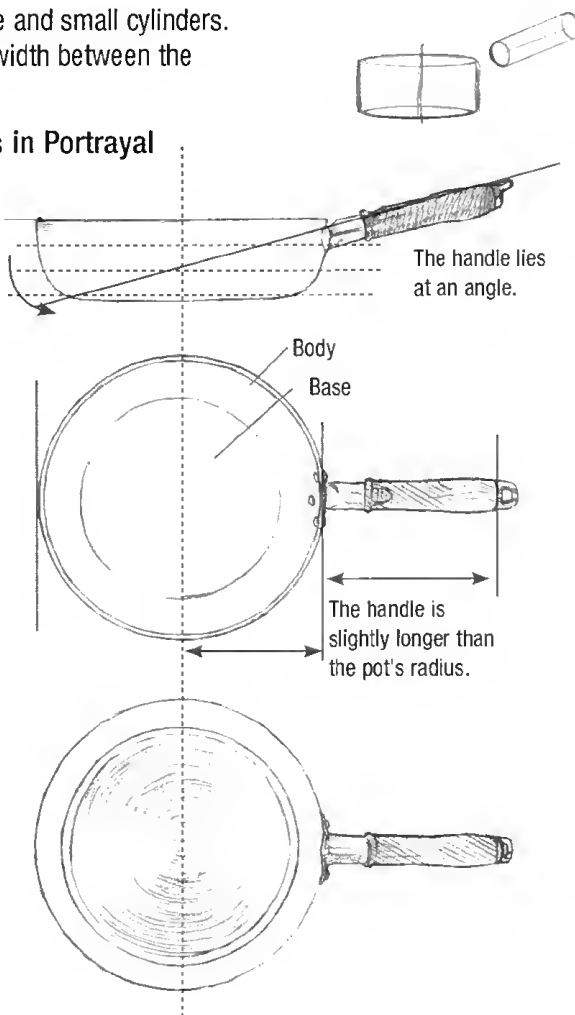
Curved region

The handle lies at an angle.

Body

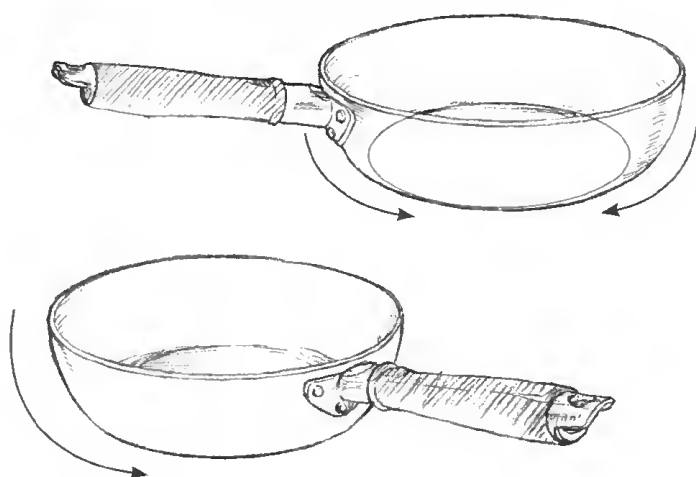
Base

The handle is slightly longer than the pot's radius.

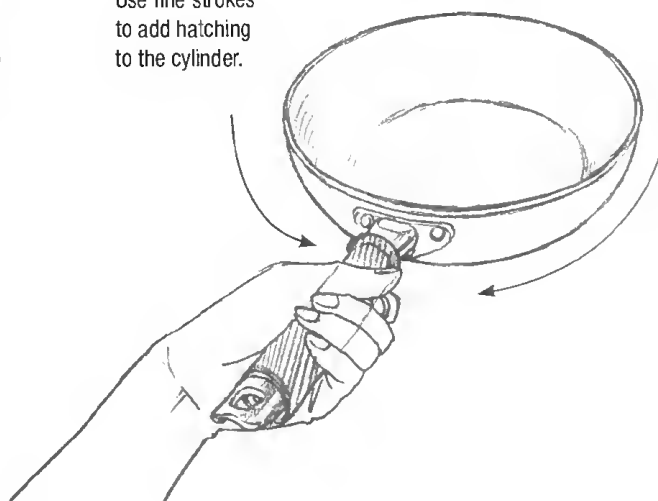


### Sketching Tips

Only a short portion of the pan's side is straight. Consequently, the more the top of the pan is visible, the rounder the sides become visually.



Use fine strokes to add hatching to the cylinder.

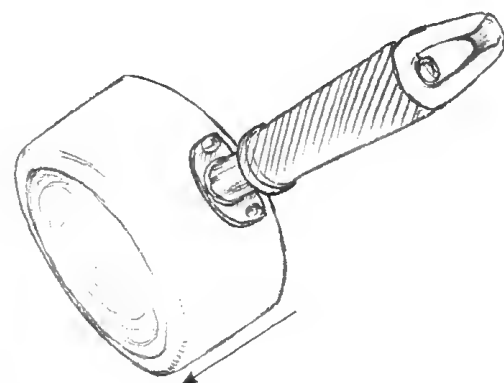
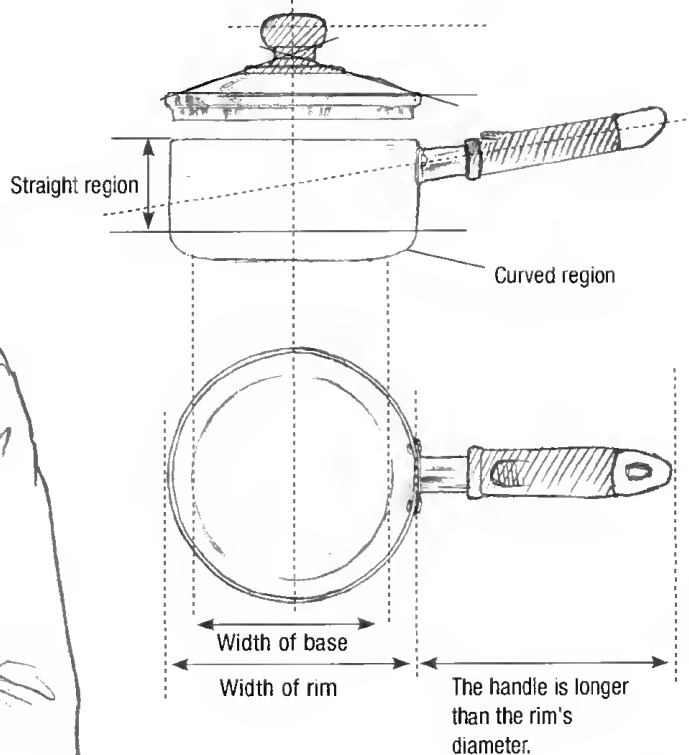




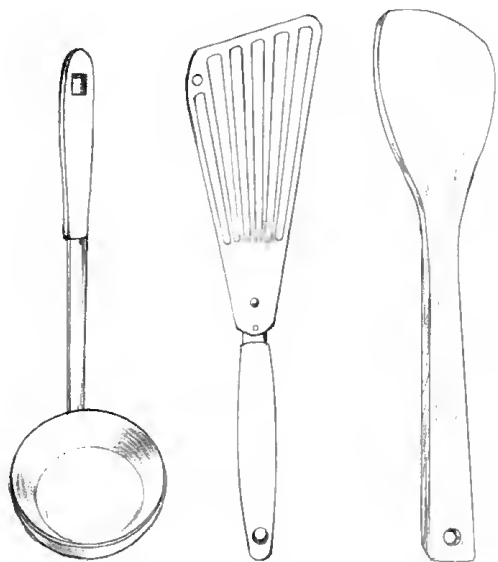
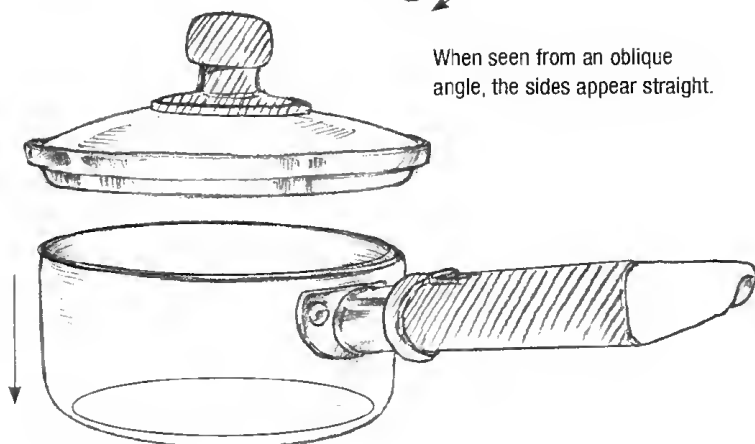
# Sauce Pans



## Key Points in Portrayal



When seen from an oblique angle, the sides appear straight.

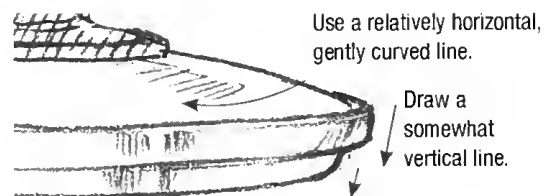


Ladle

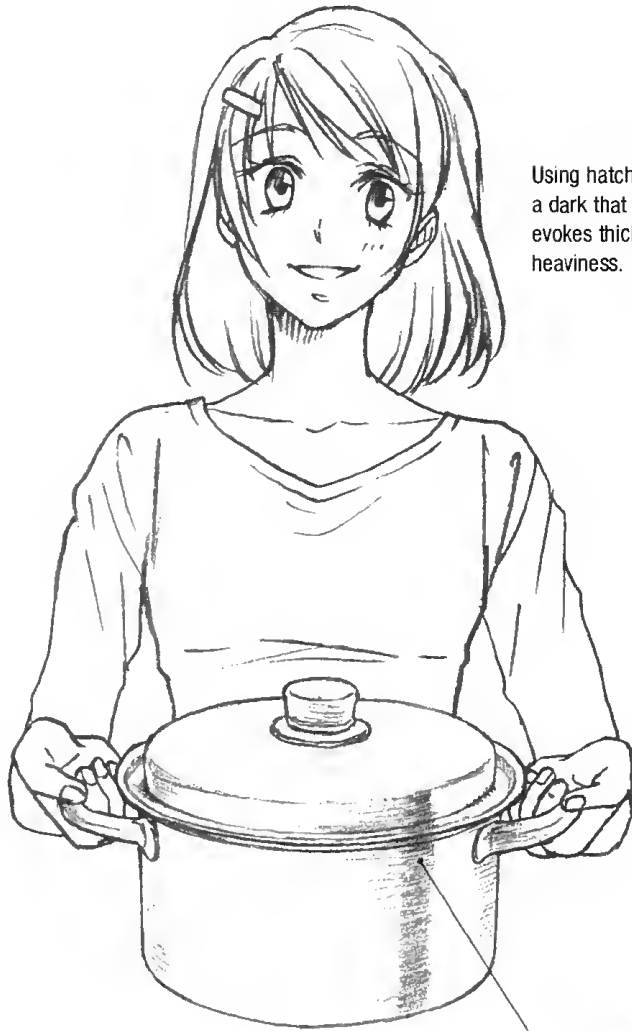
Metal spatula

Wood spatula

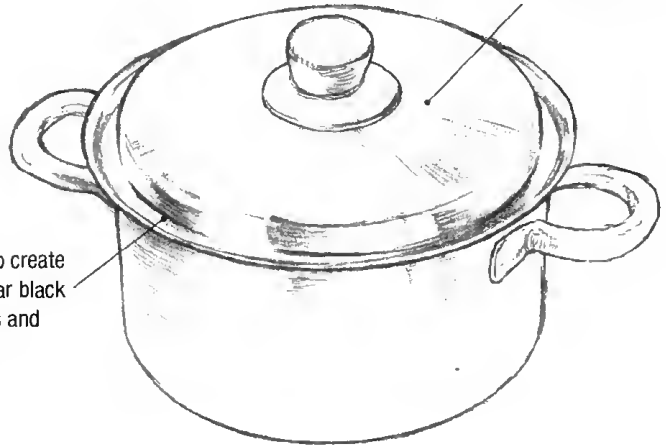
## Metallic Textures



## Pots with Two Handles

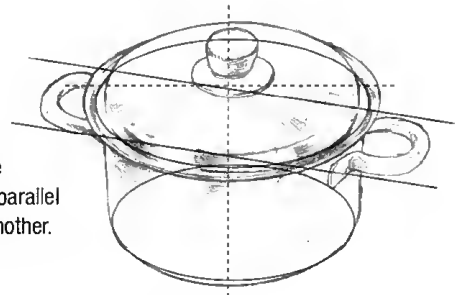


Using hatching to create a dark that is near black evokes thickness and heaviness.

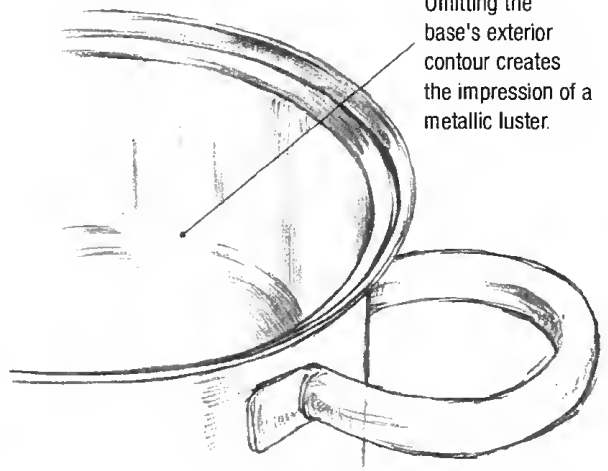


The radiating fine strokes that adhere to the lid's sloped surface create a light luster.

Draw the handles parallel to one another.



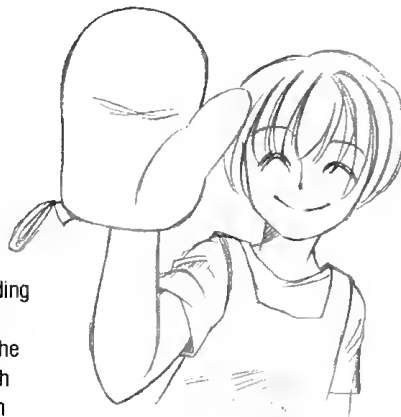
Omitting the base's exterior contour creates the impression of a metallic luster.



This shows a play of light to dark to medium.



Determine the pot's size according to the appearance of where the pot will be used, the height of the table, counter, or stove on which it will be placed, and other such factors.



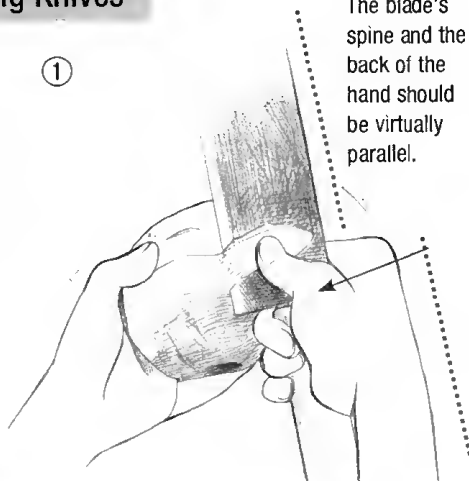
Oven mitt



## Kitchen Knives and Paring Knives

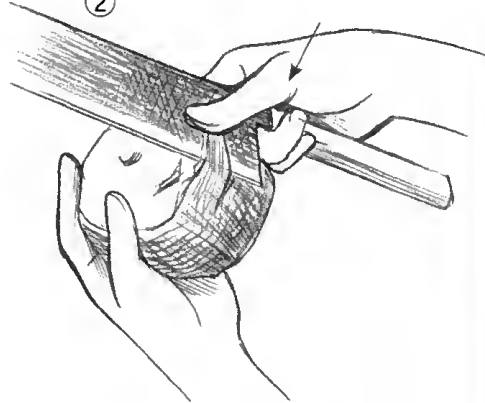


①



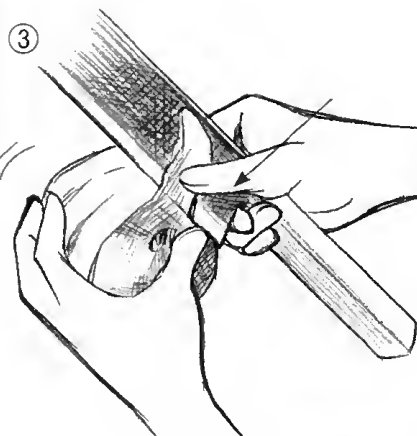
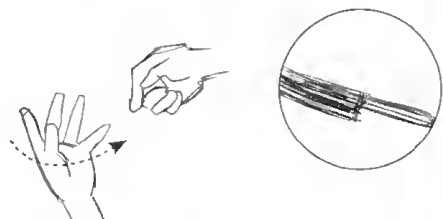
The blade's spine and the back of the hand should be virtually parallel.

②

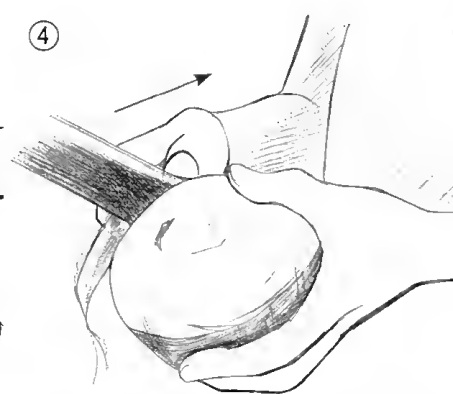


Supporting hand

Angle of knife



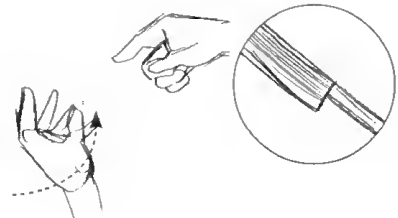
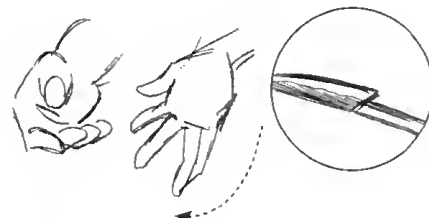
③



④



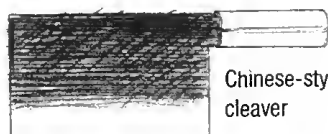
⑤



## Common Kitchen Knives



Chef's knife



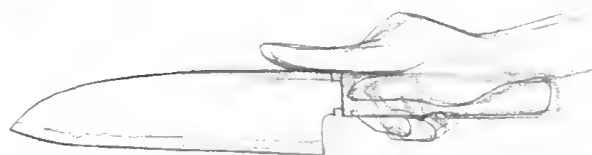
Chinese-style cleaver



Deba bocho (\*Japanese carving knife used for fish)



Sashimi bocho (\*Japanese carving knife used for sashimi)

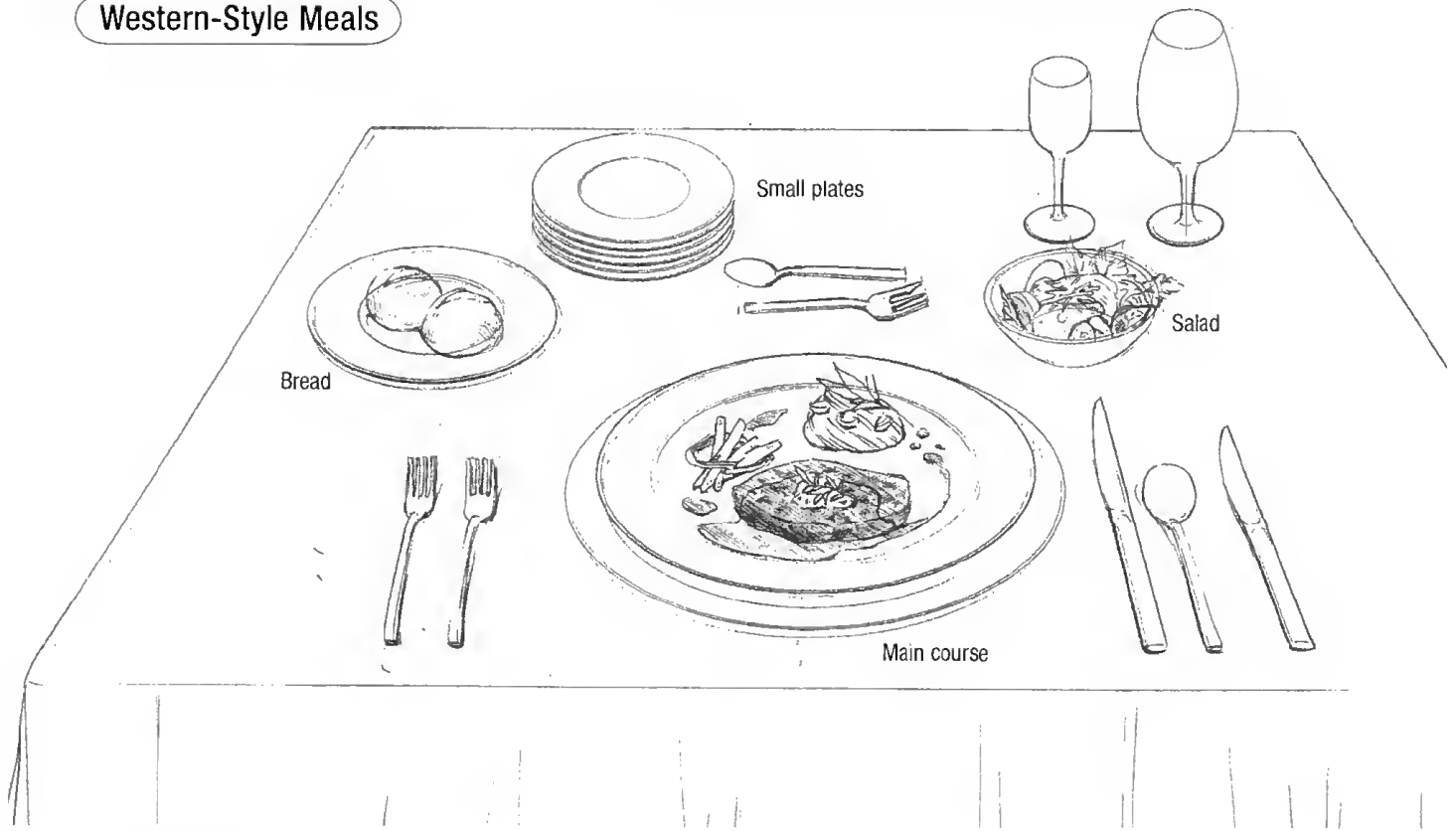


Scale Comparison with the Human Hand

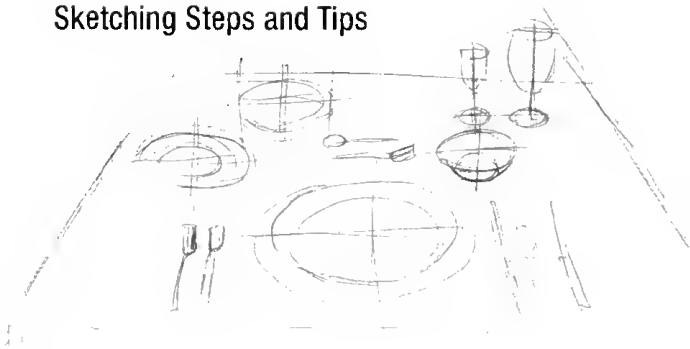
## At the Table

Artists use ellipses to create dishes on a table and hatching to create the food, which primarily requires suggestion of texture. This section discusses Western and Japanese dining styles.

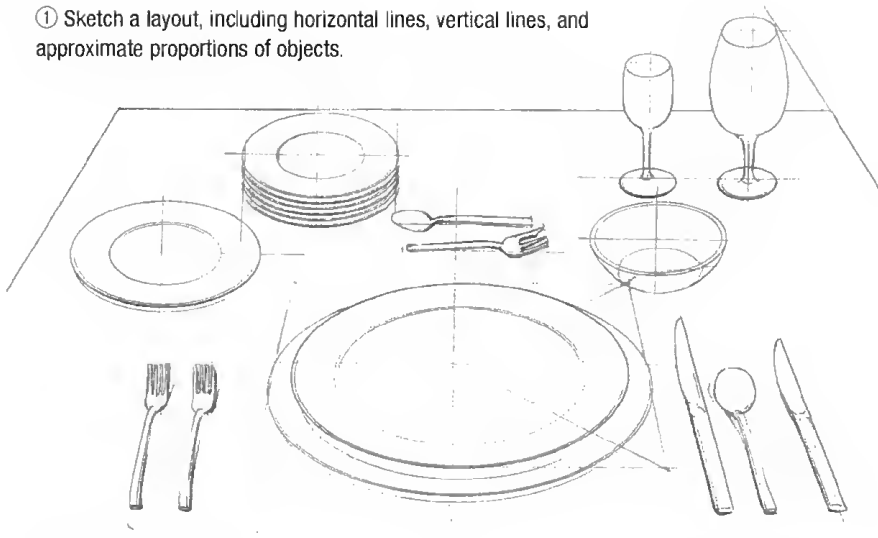
### Western-Style Meals



### Sketching Steps and Tips



① Sketch a layout, including horizontal lines, vertical lines, and approximate proportions of objects.



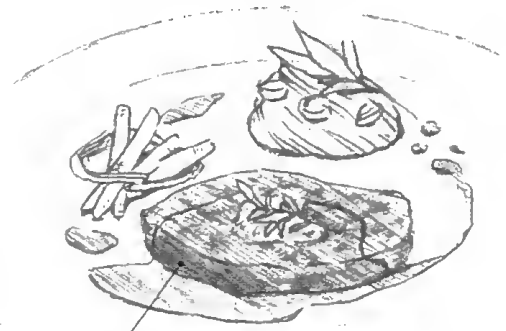
② Add the dishes, glasses, and flatware.



Bread: Lightly applied hatching using curved strokes creates shadows that portray the rolls as spheres.



Salad: The shapes of the leaves play a key role.



Use this shaded side to portray how thick the steak is.

Steak: Add fine-lined cross-hatching in a regular pattern.

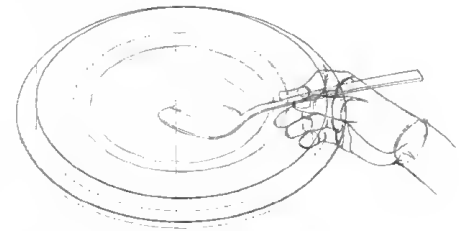
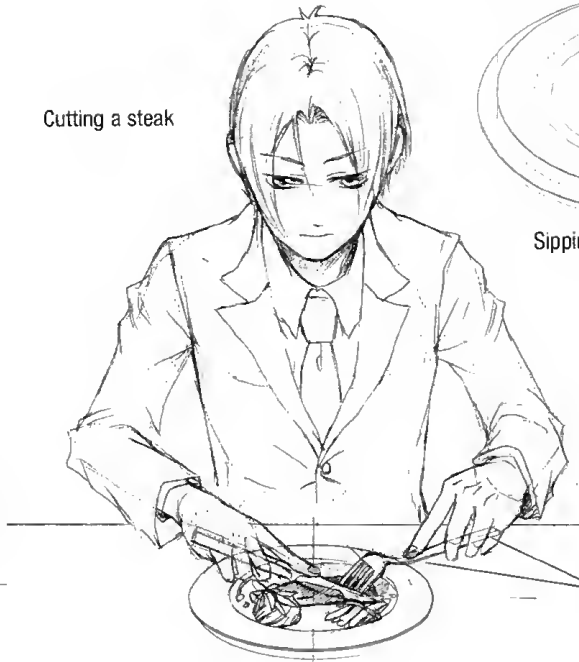
Knives, forks, and other flatware should lie in directions adhering to the table's perspective.

# Eating

Eating soup



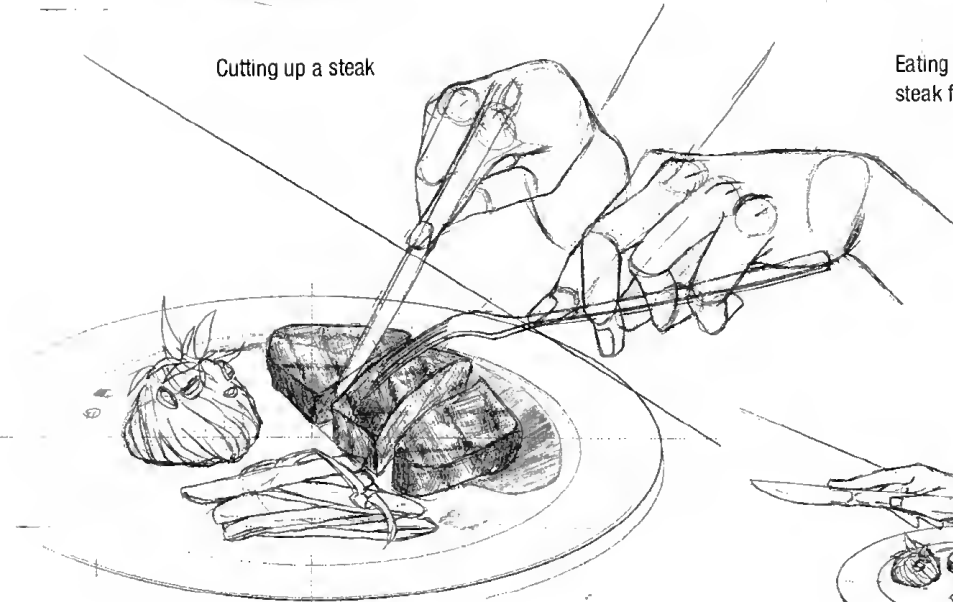
Cutting a steak



Sipping soup from a spoon

Determine where the fork's handle begins and ends in order to make it look good.

Cutting up a steak



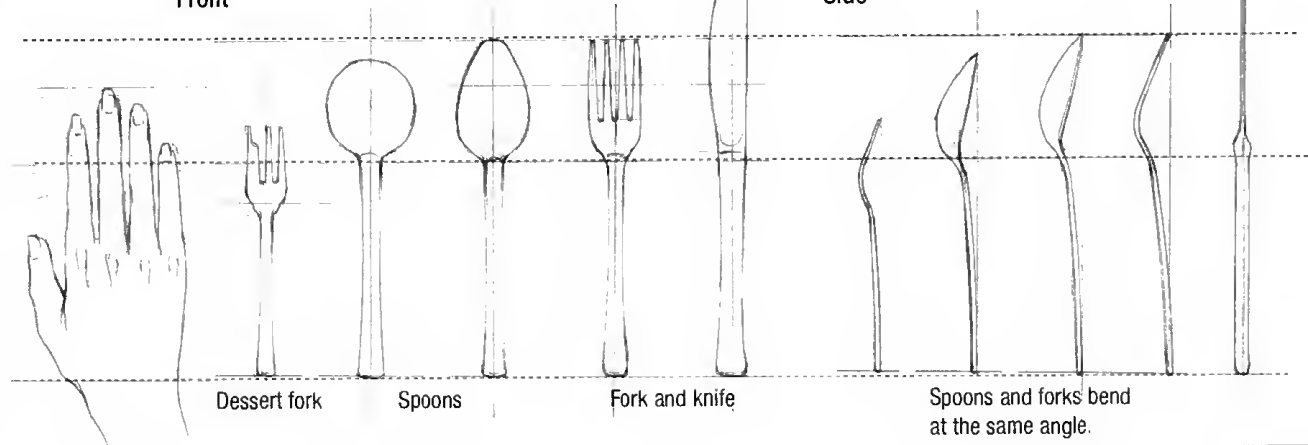
Eating a piece of steak from a fork



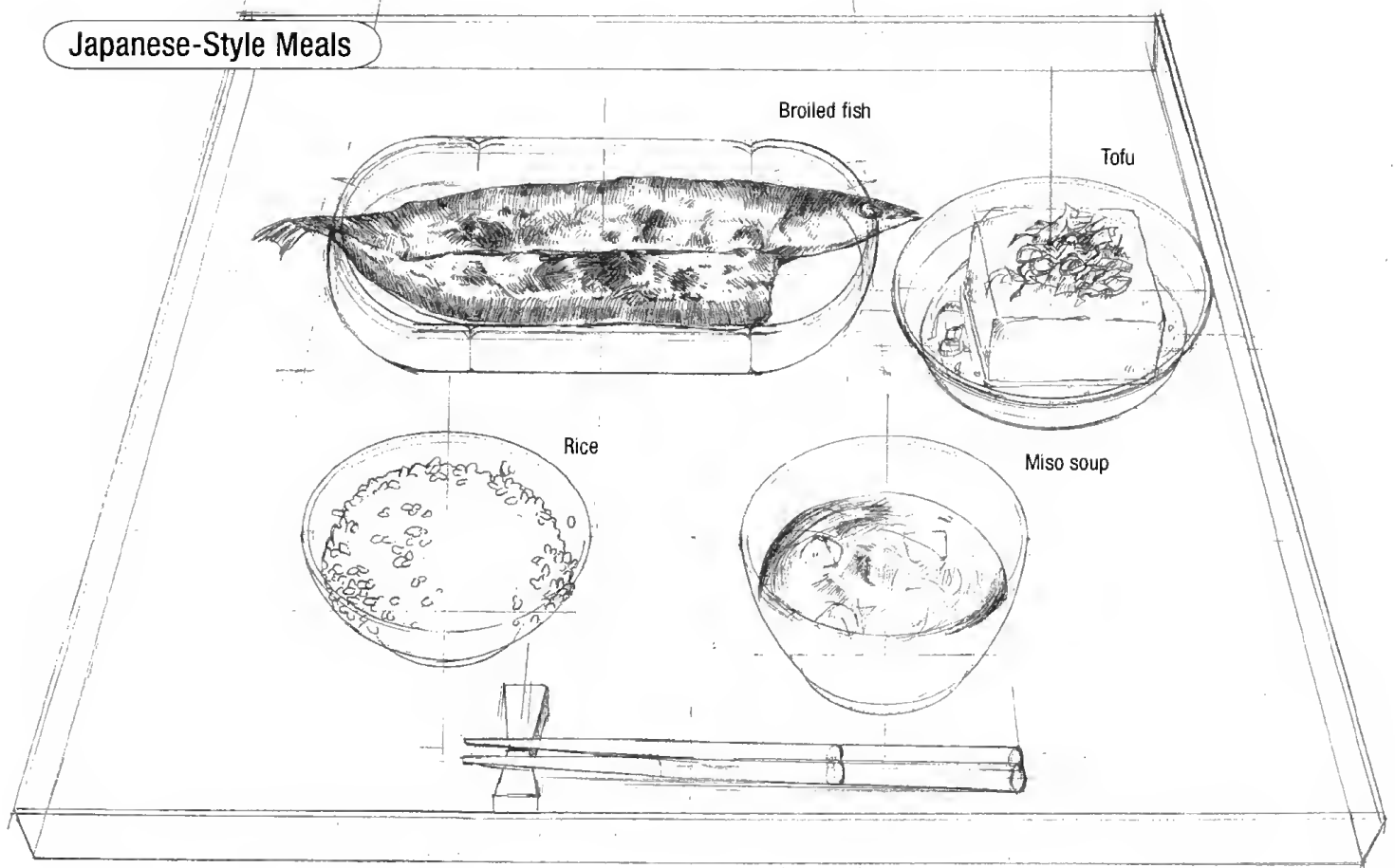
## Flatware (Silverware)

Front

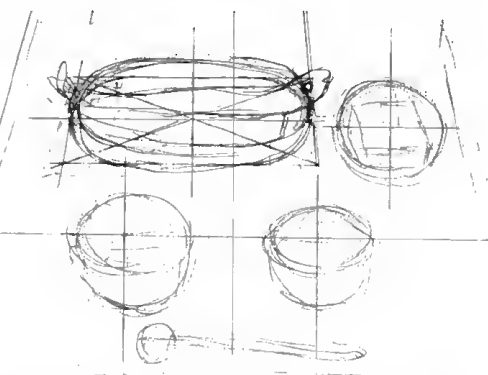
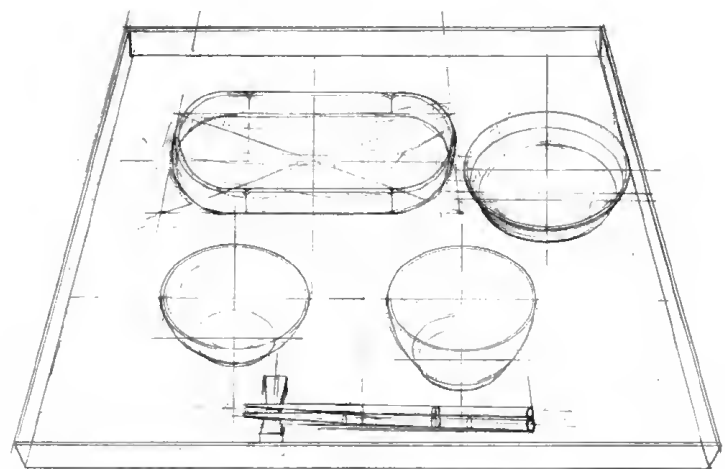
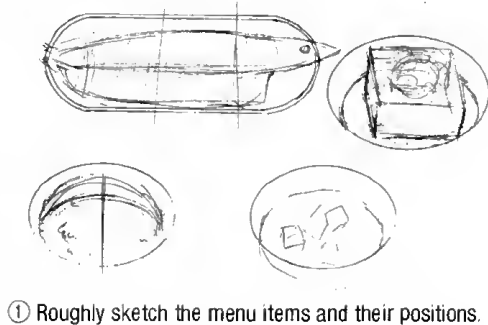
Side



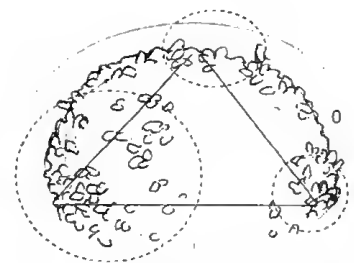
## Japanese-Style Meals



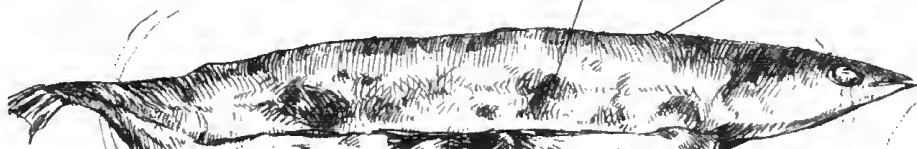
### Sketching Steps and Tips



Use cross-hatching to suggest charred areas.



Drawing rice grains in two to three locations interspersed throughout the bowl creates the illusion of a bowl full of rice.

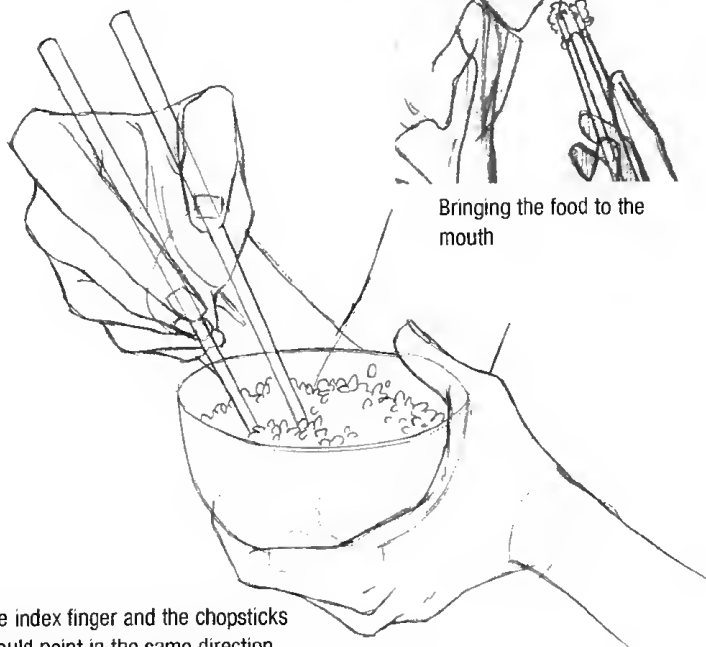


# Eating Scene

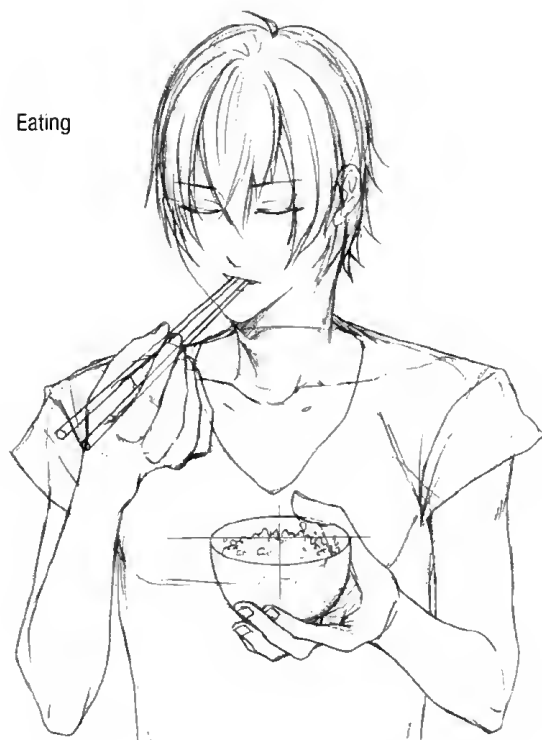
Inserting chopsticks into a dish



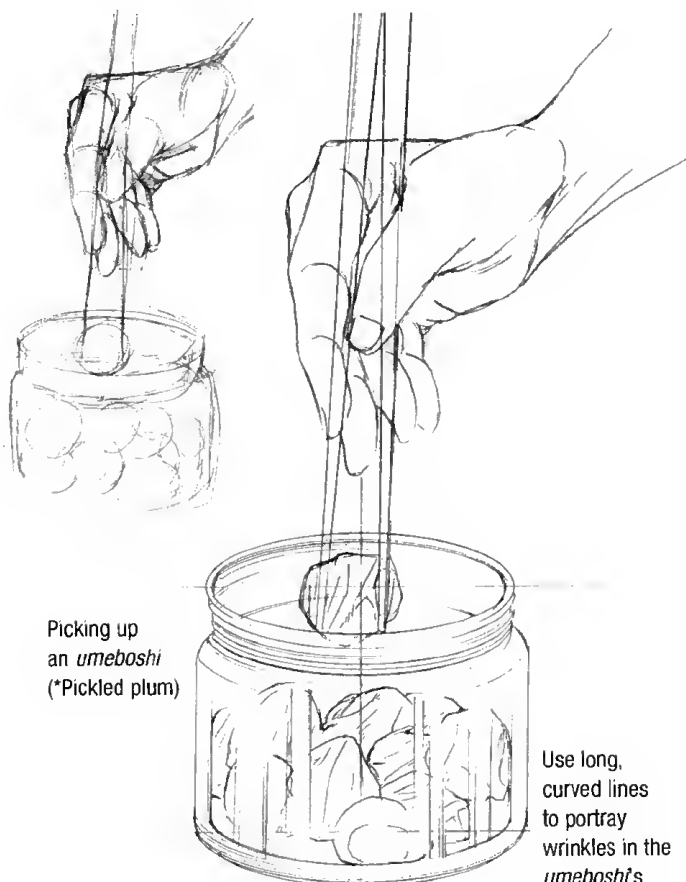
Bringing the food to the mouth



Eating

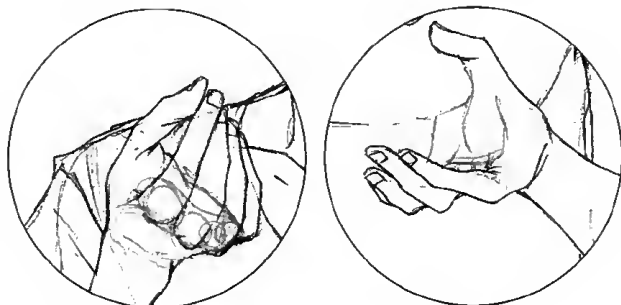


The index finger and the chopsticks should point in the same direction, so sketch them as a single unit.



Picking up an umeboshi (\*Pickled plum)

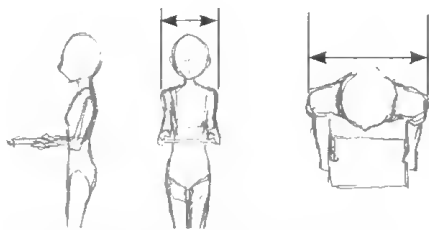
Use long, curved lines to portray wrinkles in the umeboshi's flesh.



## Serving Food

These compositions involve serving food to a guest and include bottles, cups, glasses, and other props.

### Maids



This shows the pose used when serving food on a tray. Both elbows are held close to the sides to stabilize the tray.

Despite that the elbows should be held close to the sides, sometimes showing a character with the arms held away from the sides is just visually more attractive.



Maid holding her elbows close to her sides

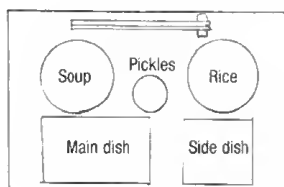


Maid holding her elbows away from her sides



Tea set

### Waitress



*Ozen*: This is a complete serving for one diner arranged and delivered on a tray. It is a dining style that features prominently in Japanese cuisine.



# Butler

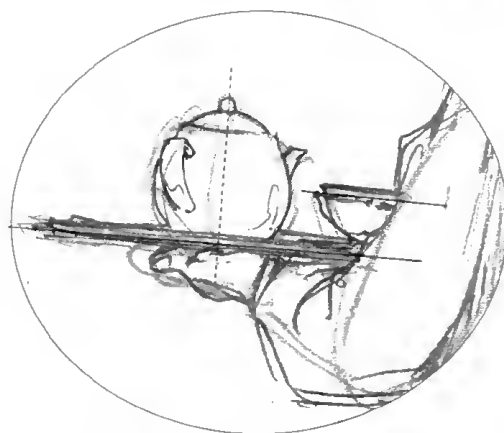
## Serving Tea



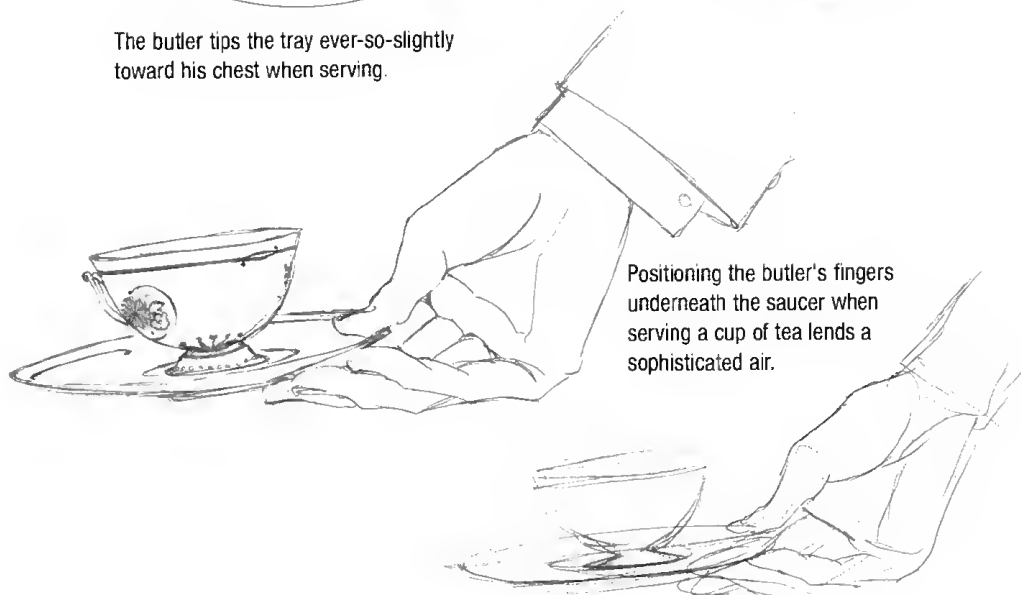
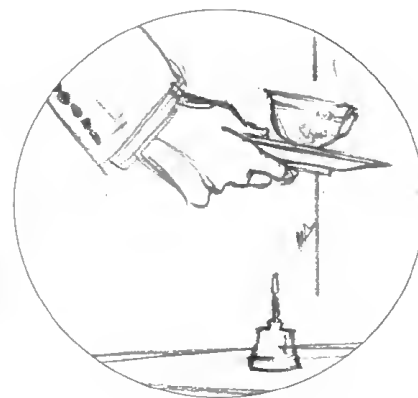
This butler is wearing a style of dress coat known as a "morning coat."



Butler carrying guests' bags



The butler tips the tray ever-so-slightly toward his chest when serving.



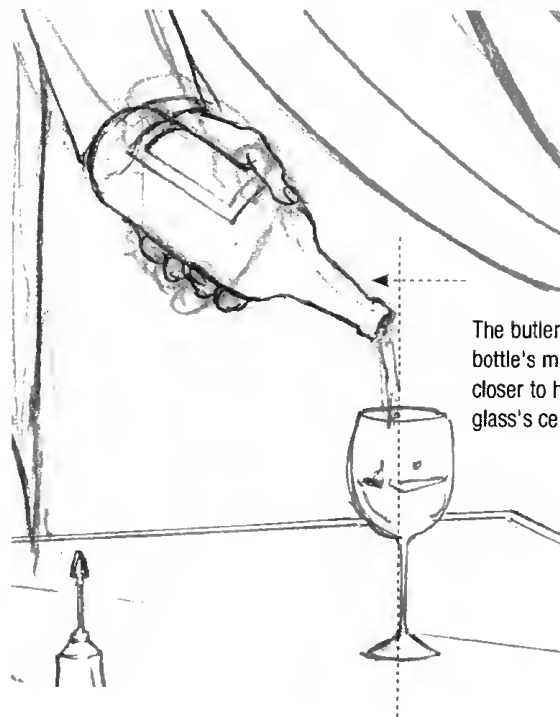
Positioning the butler's fingers underneath the saucer when serving a cup of tea lends a sophisticated air.



## Pouring from a Bottle



The butler holds his body erect from the waist and leans slightly to the side.



The butler holds the bottle's mouth slightly closer to himself than the glass's center.

## Wiping the Bottle's Mouth after Pouring



① This shows a butler pouring wine. Note that his right and left elbows are bent at similar angles.



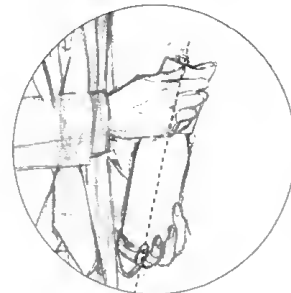
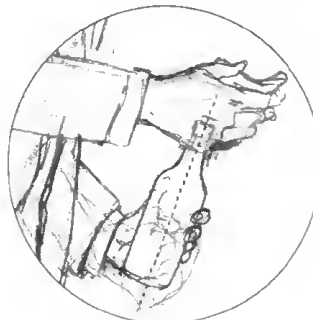
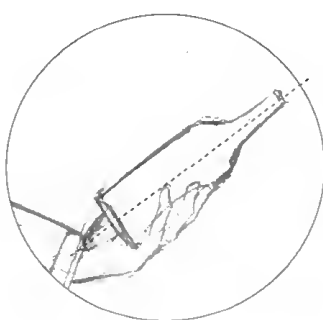
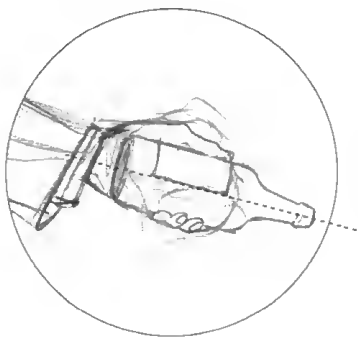
② Without changing the angle of bending in his elbows, the butler uses his wrist to raise the bottle's mouth.



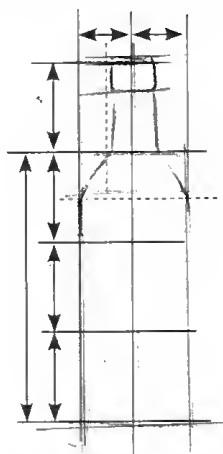
③ Without adjusting his posture, the butler turns his torso, bringing in his left elbow. The butler touches the bottle's mouth with a napkin he is holding in his right hand.



④ The butler straightens his back as he presses the napkin against the bottle's mouth.

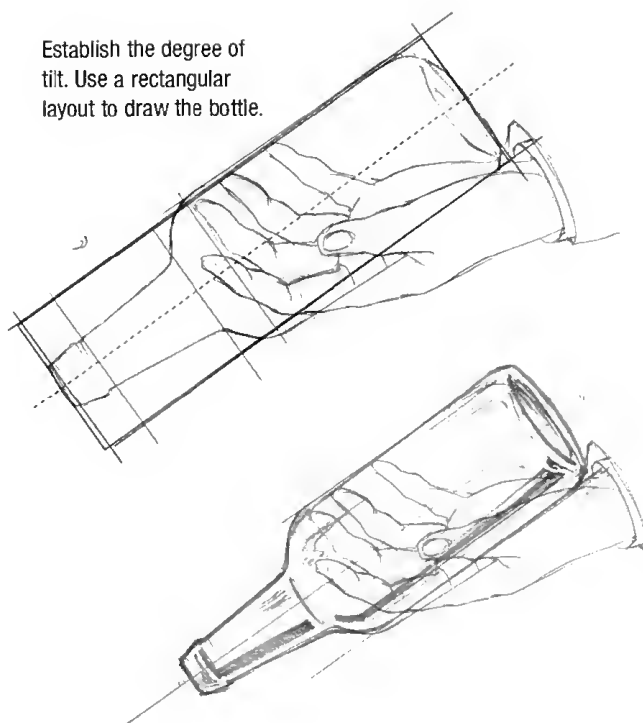


## Sketching a Bottle

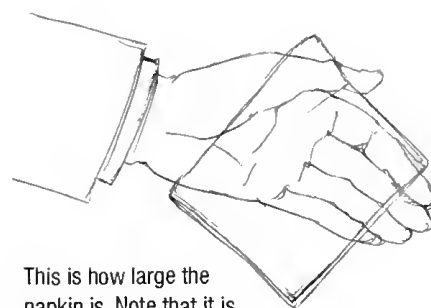


Obtain a balanced proportioning.

Establish the degree of tilt. Use a rectangular layout to draw the bottle.

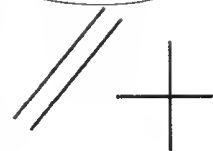


Cap



This is how large the napkin is. Note that it is folded.

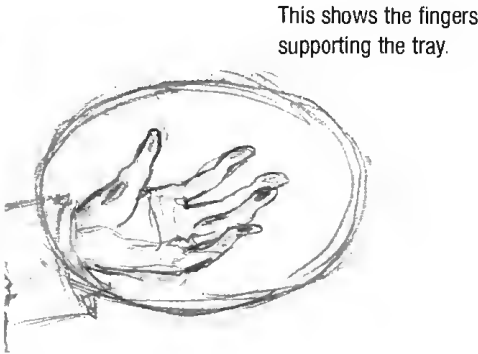
While drawing parallel lines might not seem like anything fancy, you will find it surprisingly difficult. Parallel and vertical lines lie at the heart of successful compositions.



Carrying Dishes on a Tray

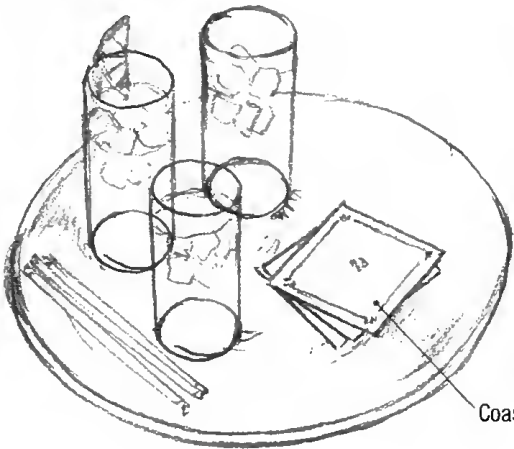


Include the hand positioned underneath the tray when sketching the layout.

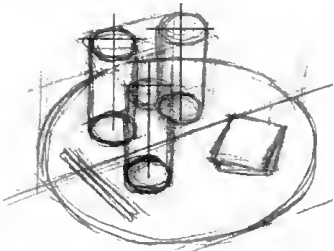


This shows the fingers supporting the tray.

Glass Tumblers

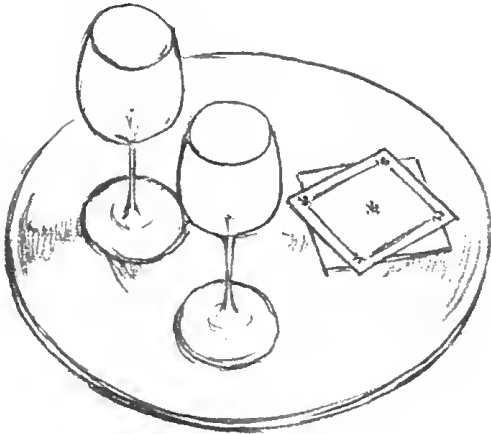


Coasters

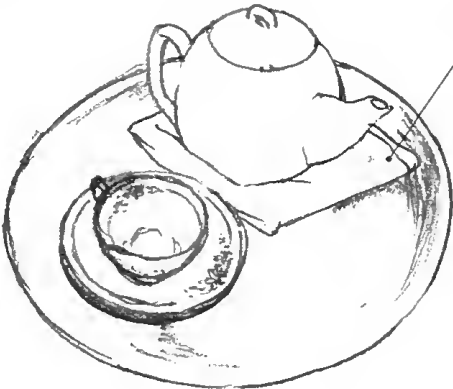


The ellipse used to portray the tray lies at an angle, while lines perpendicular to the ground define the glasses.

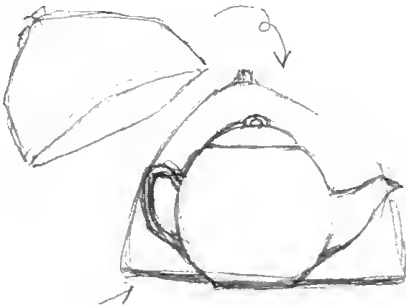
Wine Glasses



Tea Set



Tea cozy



## Bunnies

From a low angle



The bunny is holding the tray level with her shoulder. This draws the reader's eye to her.



Bunnies normally hold trays at chest level.



From a high angle



A minor curved line indicates whether a glass is seen from a high or low angle.

From a moderately low angle

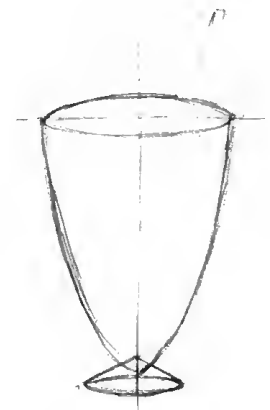


Sketch the tray approximately level with the chest and add the arm.

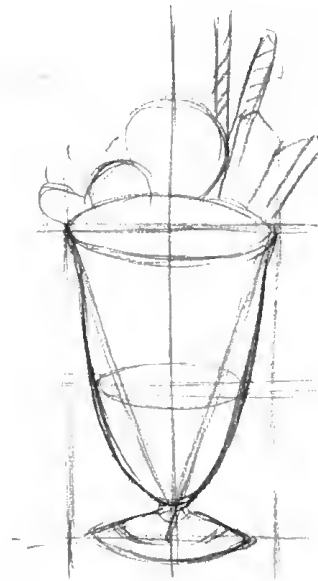
## Parfaits



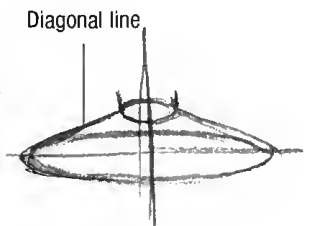
① Sketch according to the parfait's picture in your mind's eye.



② Draw the vertical and horizontal centerlines according to how you picture the parfait.



③ Add a rough sketch of the parfait's confectionery contents as you adjust the parfait glass's shape.

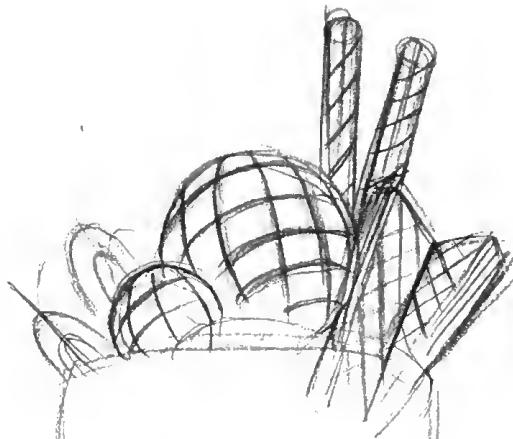


④ Foot: Connect the diagonal lines to the ellipse, while preventing sharp corners from forming.

## Parfait's Contents

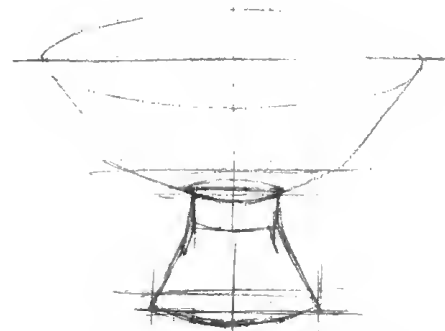


① Capture the general shapes of the parfait's contents according to how you pictured the parfait.

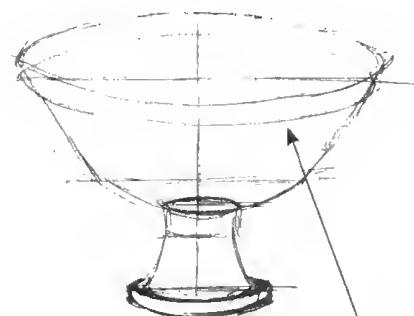


② Use geometric solids to capture the forms of the parfait's contents.

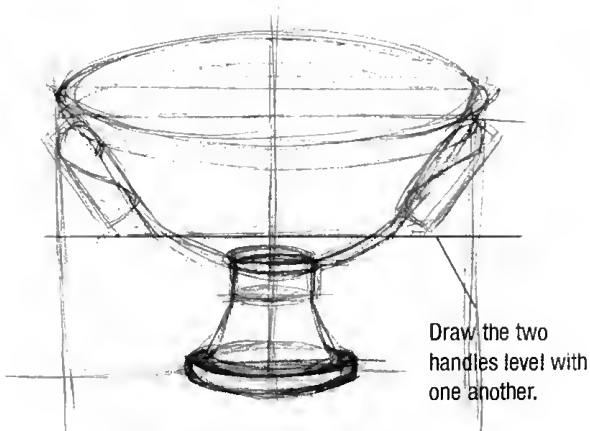
## Fruit Bowl



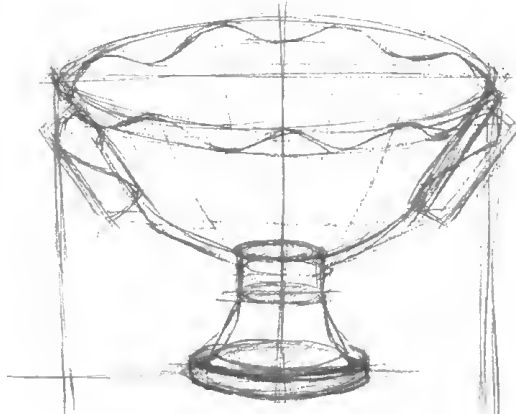
① Sketch the bowl according to how you pictured it in your mind's eye.



② The bowl will have a wavy rim, so use undulating lines in the layout.



③ Add the handles as you clean up the form.

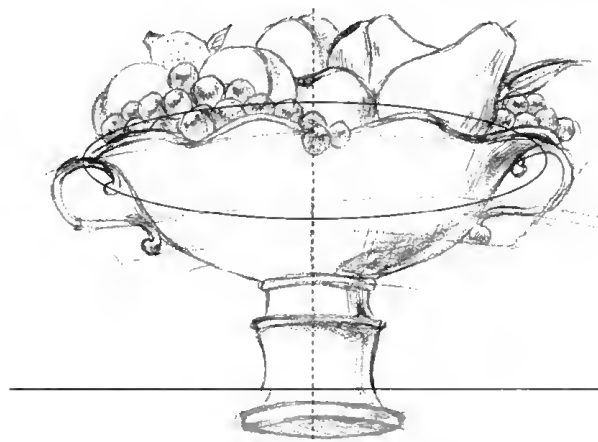


④ Add the rim's contours.



⑤ Sketch the fruit.

## Fruit Bowl from a Low Angle



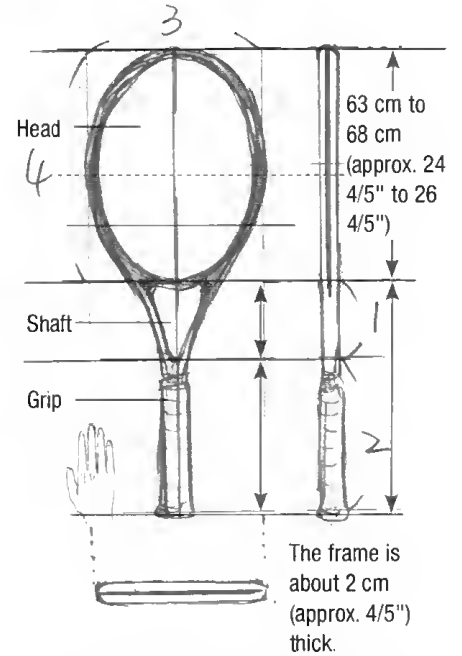
# Activity Scenes

This section covers props that frequently appear in everyday scenes. Try to capture the distinguishing characteristics of each.

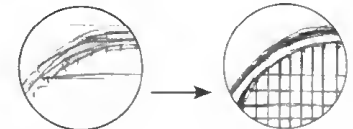
## Tennis Racquets

The average tennis racquet head is about 2 cm (approx. 4/5") thick. Capture the racquet's overall form as a block.

### General Proportioning



Divide the racquet up into the following three parts—the head, the shaft, and the grip—when capturing its overall form.



Draw dots at regular intervals around the head.

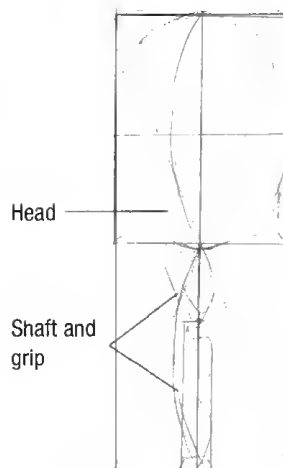
Draw horizontal and vertical strings crisscrossing.

Use the human head as a basis of measurement.



A racquet is about three and a quarter heads in length.

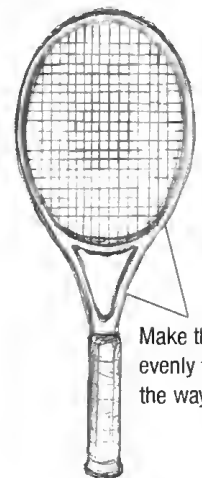
### Sketching Tips



① Produce a general thumbnail sketch to check the proportioning.



② Produce a rough, general sketch of the racquet.



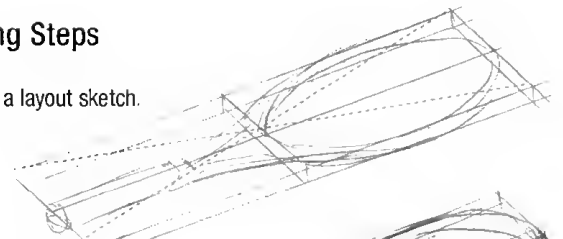
③ Clean up the form and add the details to finish.

Make the frame evenly thick all the way around.

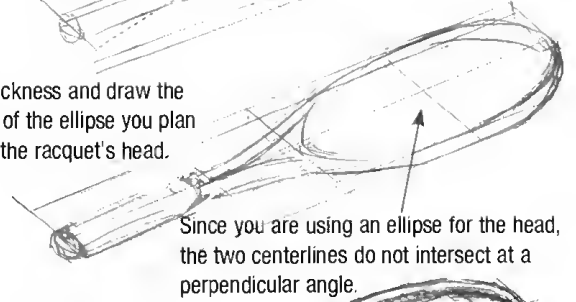


## Sketching Steps

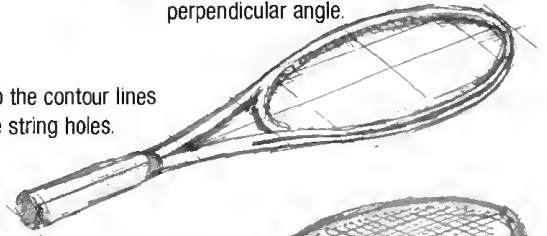
① Produce a layout sketch.



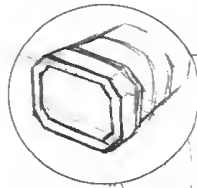
② Add thickness and draw the centerline of the ellipse you plan to use for the racquet's head.



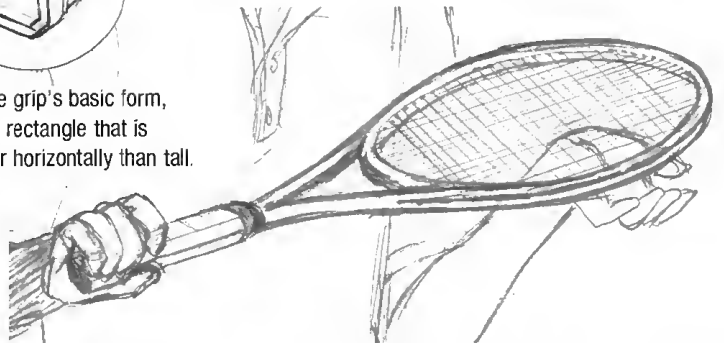
③ Clean up the contour lines and add the string holes.



④ Add the details to finish.



As the grip's basic form, use a rectangle that is longer horizontally than tall.



## Appearance of Passersby

Dress passersby so that the reader will know at a glance that these are fellow tennis players.



This girl is wearing a polo shirt, a tennis skirt, and is carrying a large tennis bag with a shoulder strap.



This girl is carrying a racquet bag.

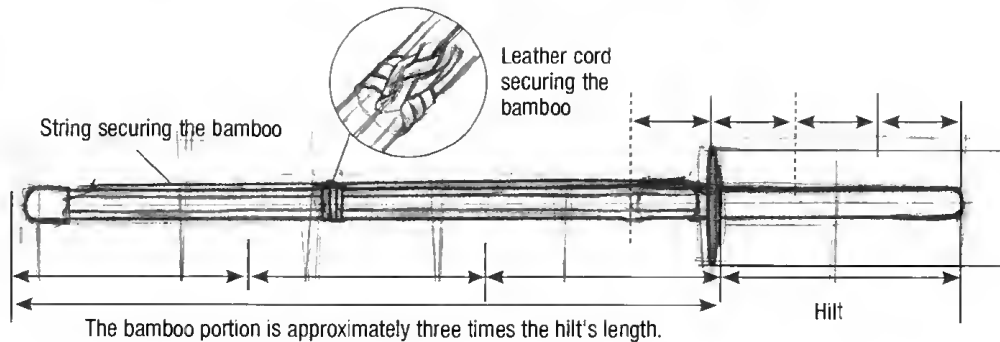


## Shinai (Bamboo Swords)

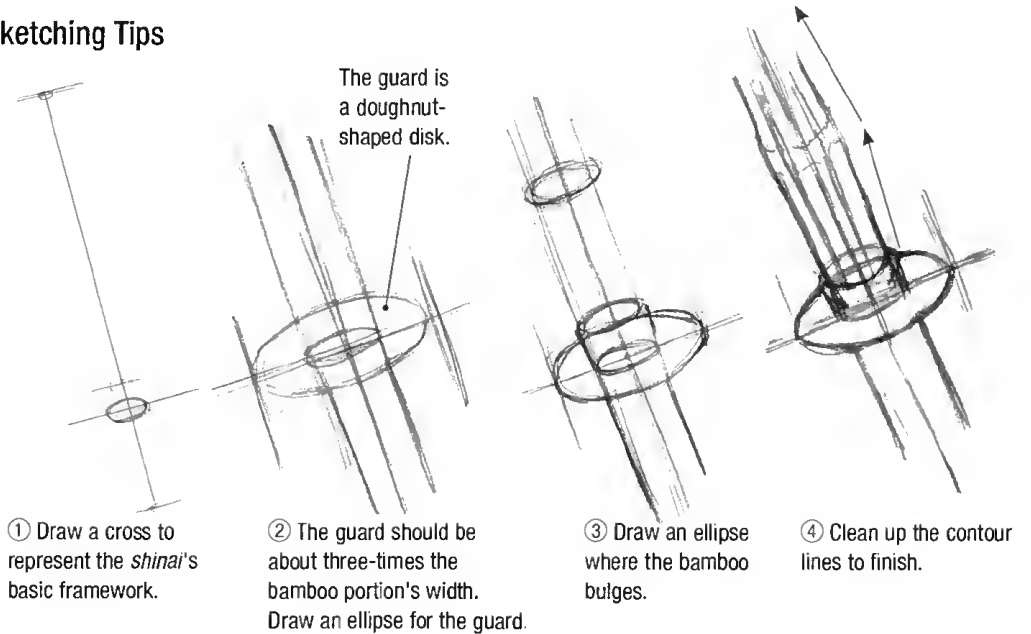
Draw a long tube. The end and the guard are circles. However, these will become ellipses, depending on the shinai's angle.



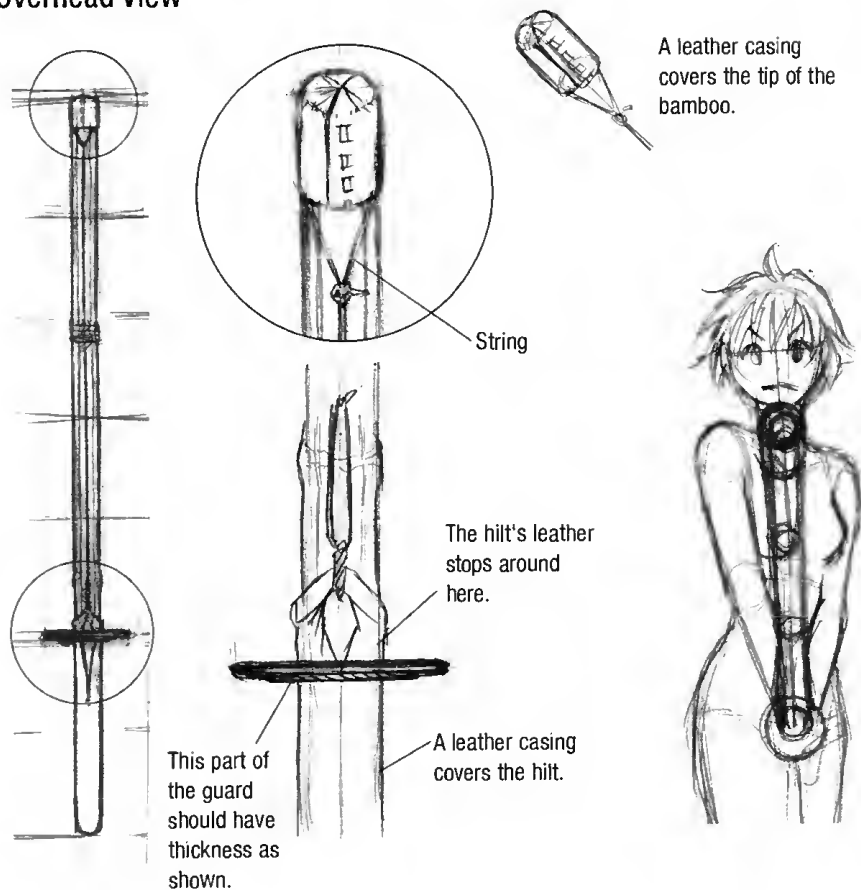
### Profile View



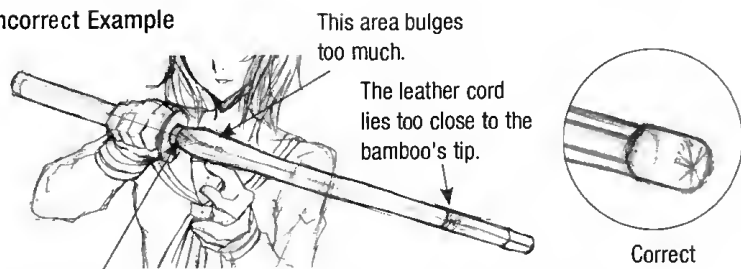
### Sketching Tips



## Overhead View



### Incorrect Example



The shoulder is narrower than the grip.

Even though we are looking at the guard's top, the *shinai* is pointed downward. Also, when the *shinai* is held in this manner, the string should be shifted to the *shinai*'s top.

### Appearance of Passersby

Passersby would carry at *shinai* case and an equipment bag.

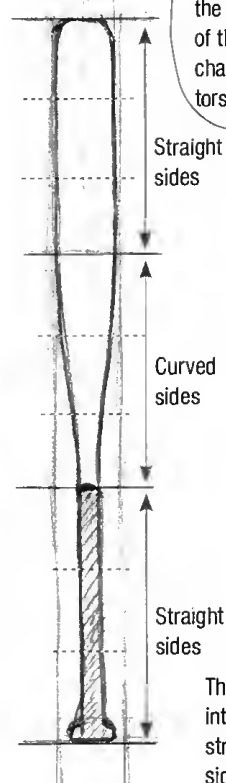


### • Baseball

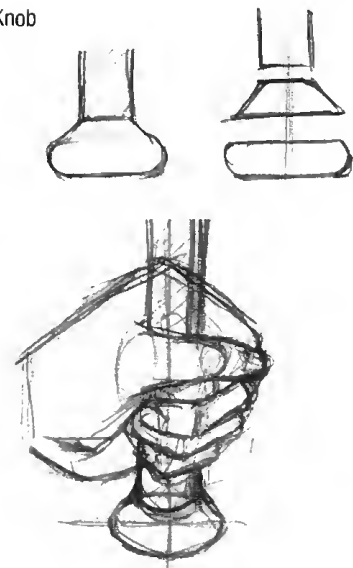


## Bats

Bats come to about the bottom of the character's torso.



### Knob



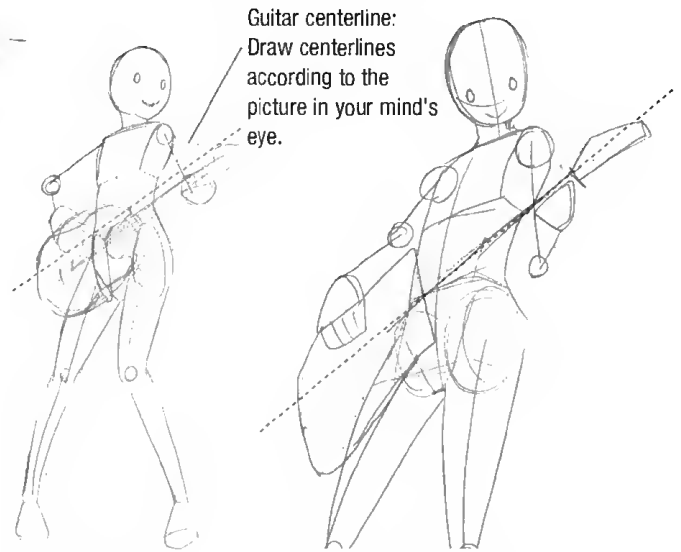
Adjust the lengths of both *shinai* and baseball bats according to the characters holding them.



## Guitars

The guitar is an advanced application of the tennis racquet. Guitars involve complicated curves, so it is critical that you include centerlines and sketch a layout in order to achieve proportional balance.

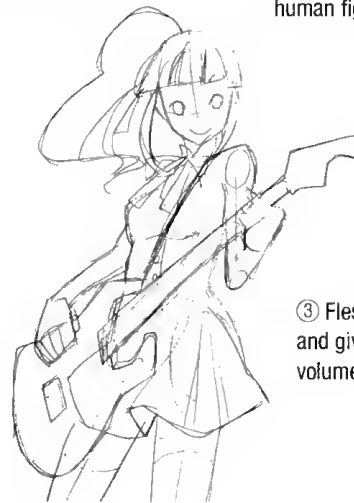
### Sketching Steps: Characters and Guitars



Guitar centerline:  
Draw centerlines  
according to the  
picture in your mind's  
eye.

① Produce a  
thumbnail sketch.

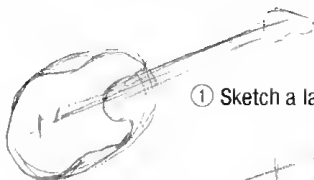
② Use simple lines and  
geometric forms to draw the  
human figure and guitar.



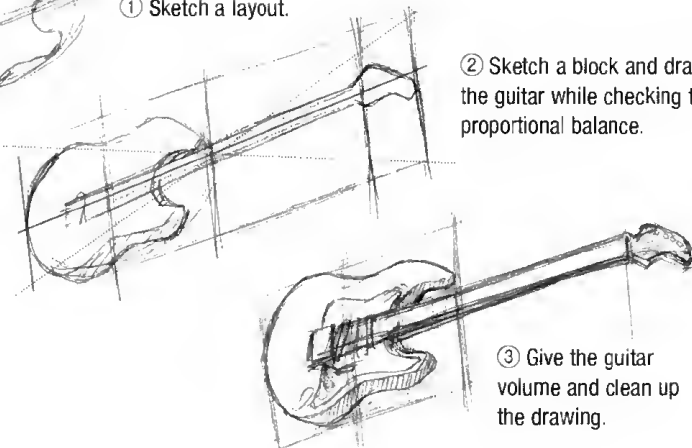
③ Flesh out the figure  
and give the guitar  
volume.

④ Final image

### Sketching Steps: Guitars

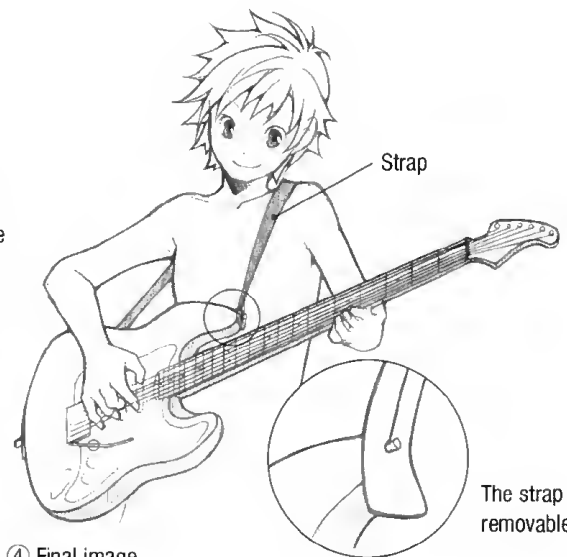


① Sketch a layout.



② Sketch a block and draw  
the guitar while checking the  
proportional balance.

③ Give the guitar  
volume and clean up  
the drawing.



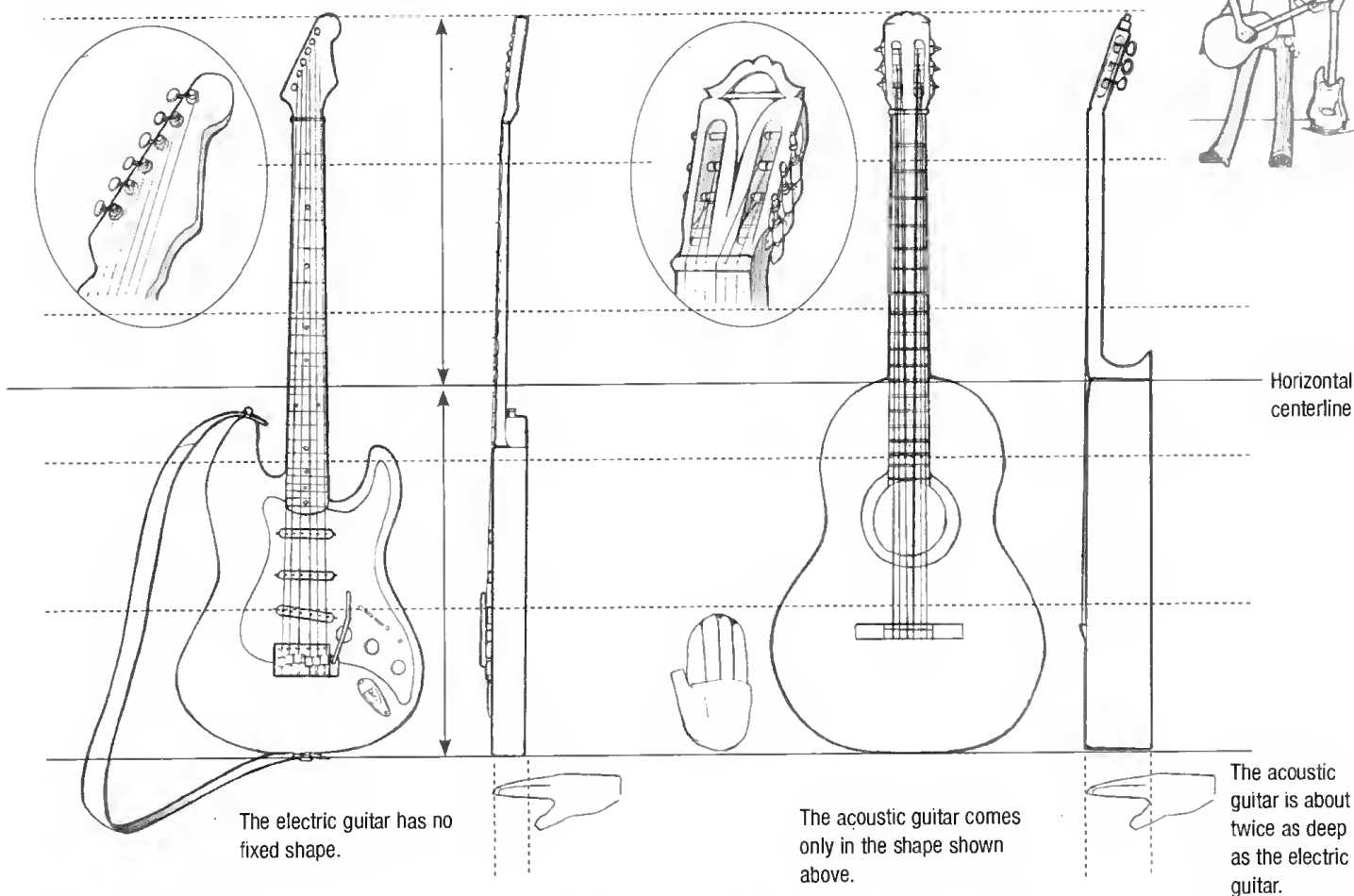
The strap is  
removable

④ Final image

## Two Types of Guitar

### Electric Guitar

### Acoustic Guitar

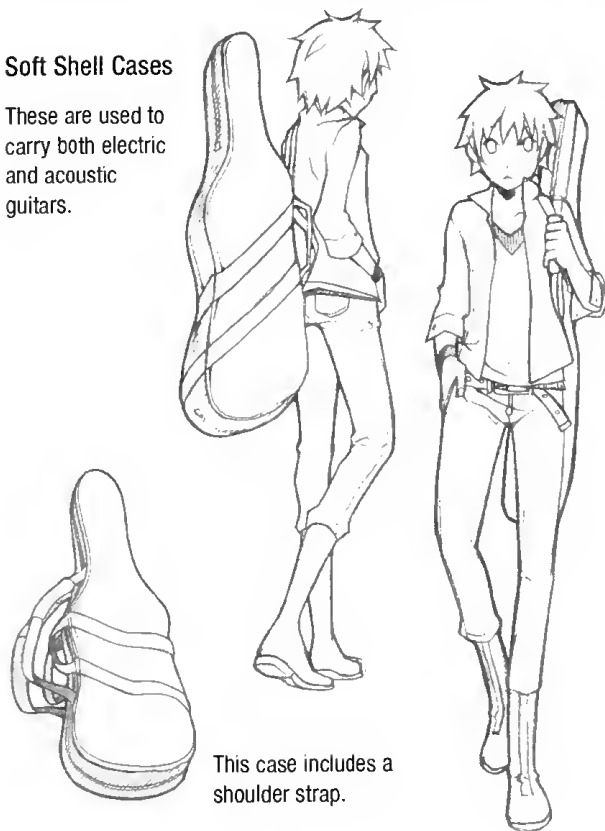


## Appearance of Passersby

These passersby are carrying guitar cases. Guitar cases may be hard or soft.

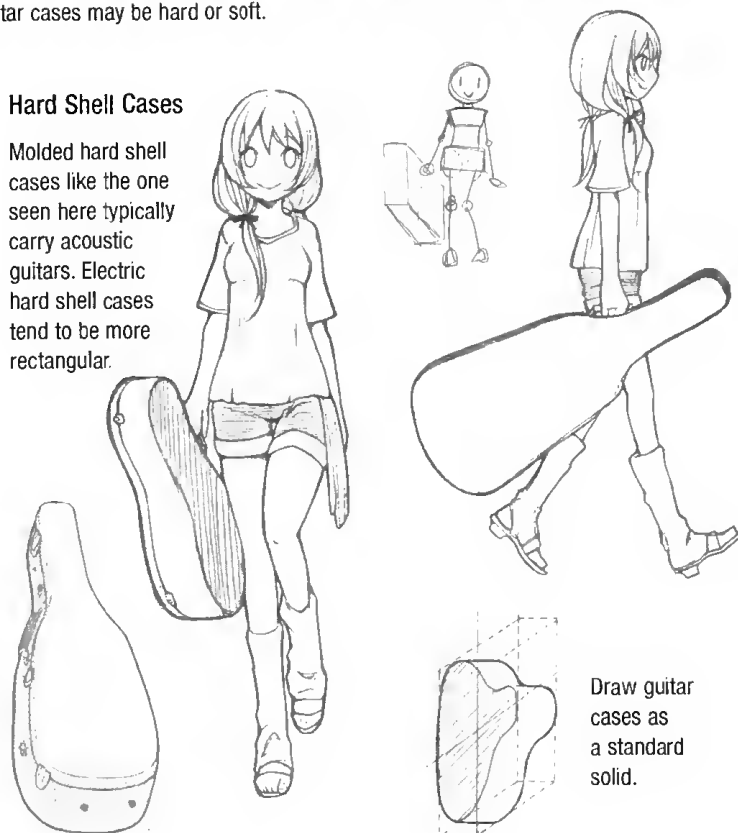
### Soft Shell Cases

These are used to carry both electric and acoustic guitars.



### Hard Shell Cases

Molded hard shell cases like the one seen here typically carry acoustic guitars. Electric hard shell cases tend to be more rectangular.



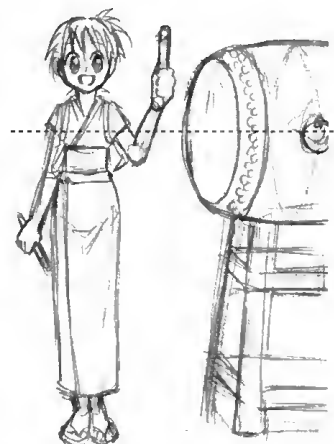
# Taiko

(\*Traditional Large Drums)

Use a standard solid with a cylinder as its base form.

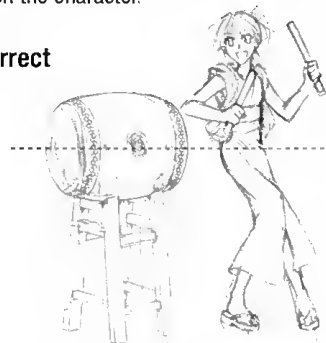


## Scale Comparison with a Human Figure



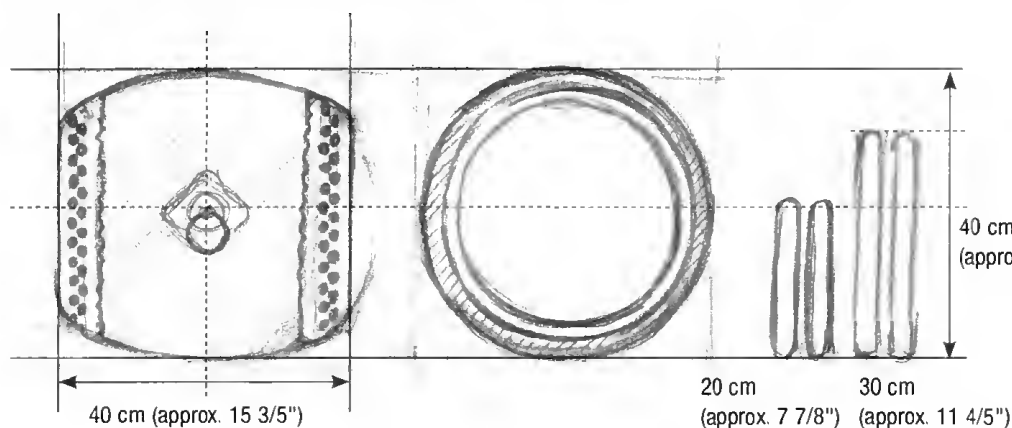
The above shows the spatial relationship between the character and the *taiko*. The *taiko*'s center should come to about chest-level on the character.

## Incorrect

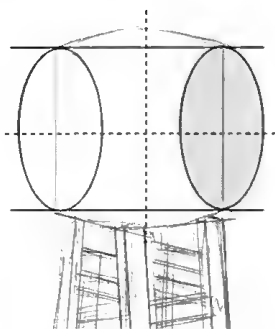


Incorrect Example: Here, the *taiko* is too low and is too small. At this height, there would be no power when striking the drum.

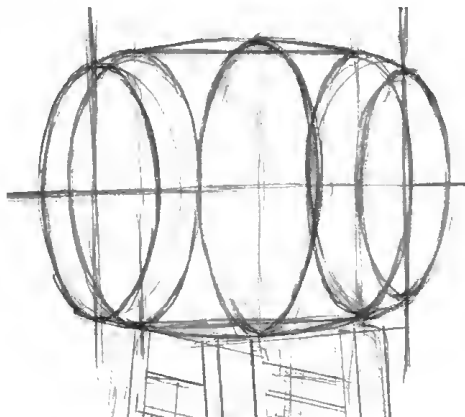
## Taiko and Bachi (\*Drumstick) Scaling



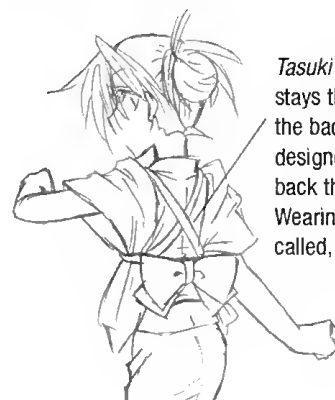
## Sketching Tips



Draw the same ellipse on both the right and left side and then sketch the layout.



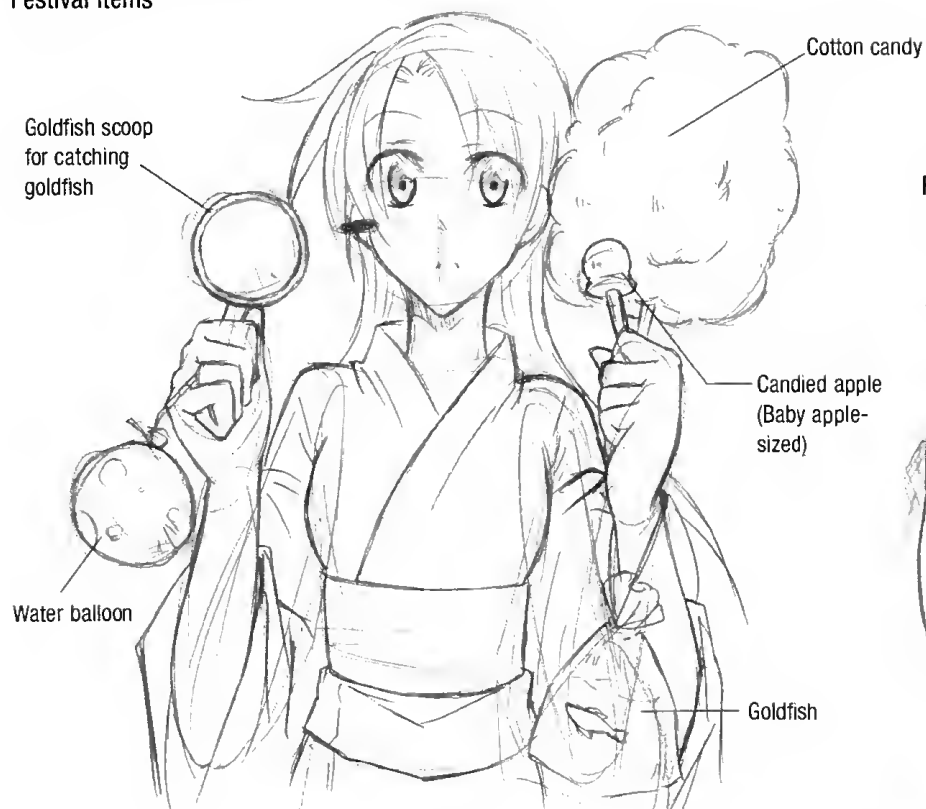
## Wearing Tasuki



*Tasuki* are fabric stays that cross at the back and are designed to hold back the sleeves. Wearing a *tasuki* is called, "*tasukigake*."

## Popular Japanese Festivals and Festival Items

Dressing a character in a summertime, cotton kimono called a "yukata" and showing her with treats commonly sold at festivals allows you to create a convincing festival or fair-like atmosphere.



## Ring Toss

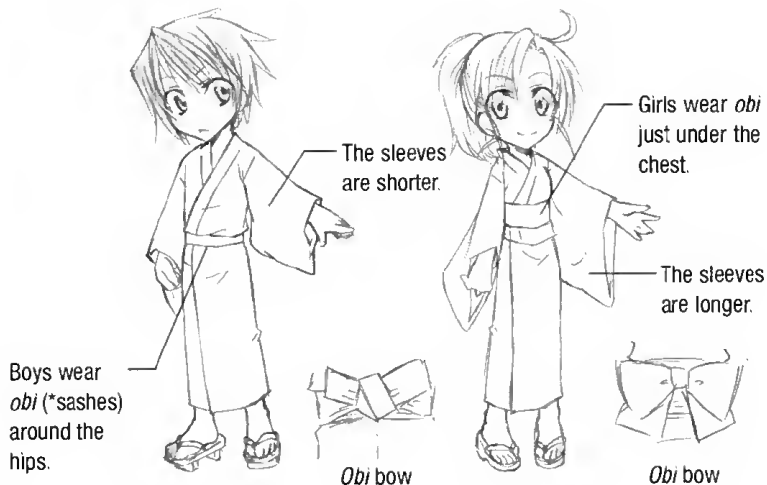


## Catching Goldfish



Rings used to play ring toss come in two sizes—small and large.

## Yukata



## Shaved Ice





# Stepping Out

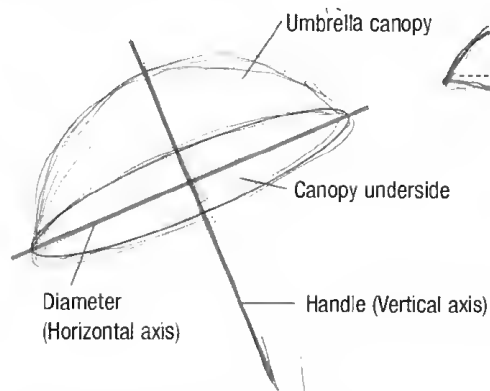
## Umbrellas

The key ingredient to drawing umbrellas, bicycles, motorcycles and cars lie in properly drawing circles and ellipses.

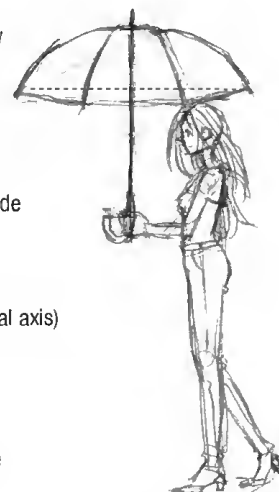
Let's start with a cross.

### Sketching Tips

#### Draw a Cross

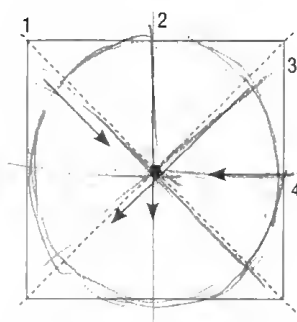


Draw the handle and the horizontal axis at perpendicular angles to form a cross. Next, use this cross to draw an ellipse.

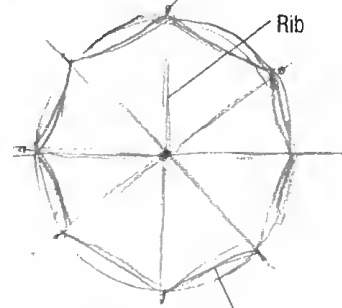


Rib tip: This is the farthest point from the center.

#### Drawing the Ribbing

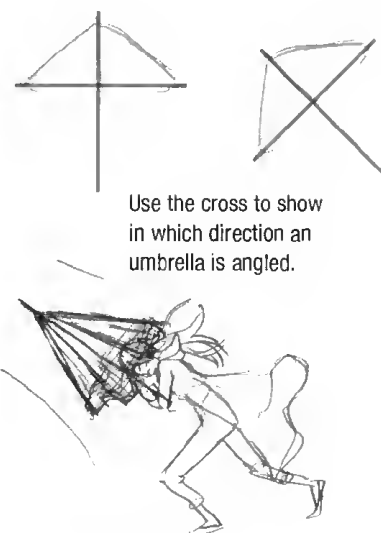
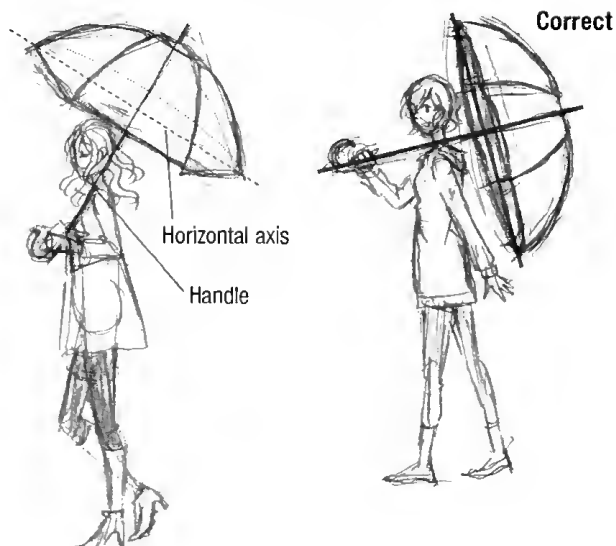


Most umbrellas have eight ribs. Draw four lines passing through the canopy's center point.



Use curved lines to connect the rib tips.

### The Handle and the Horizontal Axis Are Perpendicular

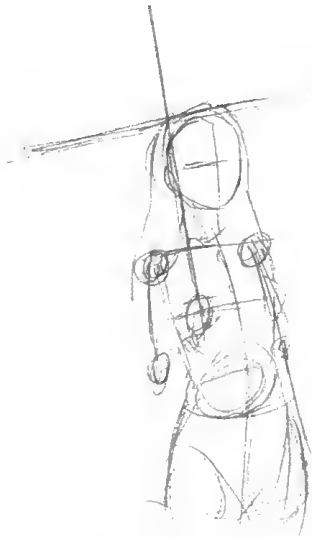


Use the cross to show in which direction an umbrella is angled.



## Sketching Steps (Front View)

The guideline for determining the umbrella's height and the horizontal axis lie parallel to one another.



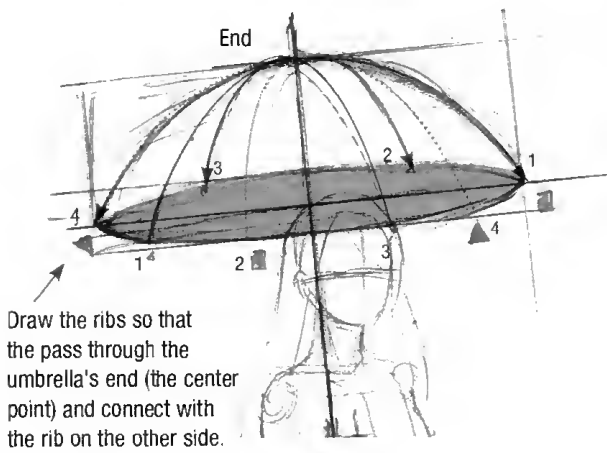
① Sketch a layout of the character and draw a cross.



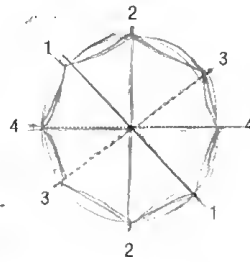
② Draw a guideline for determining the umbrella's height.



③ Sketch a rectangular layout and produce a rough sketch.

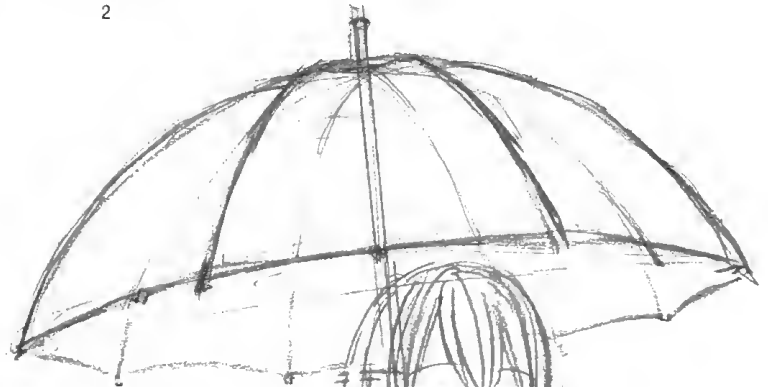


Draw the ribs so that they pass through the umbrella's end (the center point) and connect with the rib on the other side.



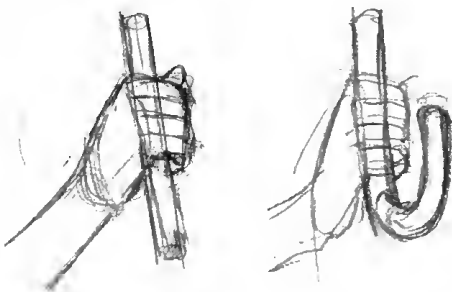
Draw the ribs moving toward four points, each with another point on the umbrella's opposite side.

④ Draw the ribs so that they adhere to the umbrella's curved surface.



⑤ Clean up the shapes to finish.

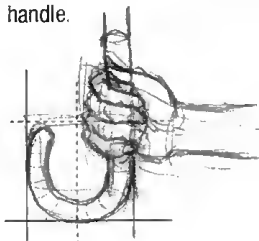
## Drawing the Handle



① Sketch a hand grasping the handle.



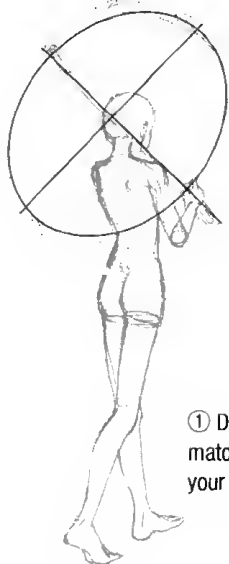
② Draw the tube's end.



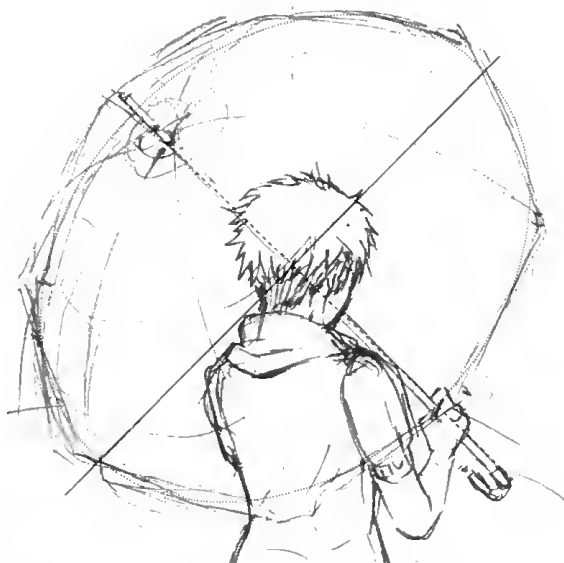
Draw the handle in profile so that you will have some familiarity with its form.



# Sketching Steps (Rear View)



① Draw a sketch to match the image in your mind's eye.



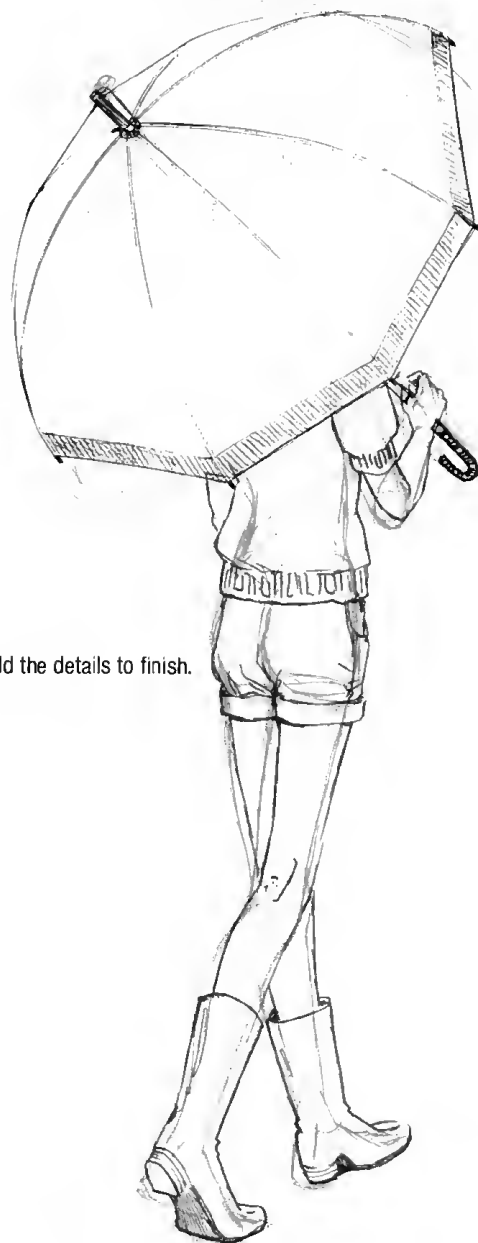
② Sketch the character and draw a layout of the umbrella.



Ref.: Try to draw a see-through umbrella.



③ Add the ribs and clean up the shape.



④ Add the details to finish.



The above shows a Western-style umbrella. The tube is metal and the canopy contains eight ribs.



This is a Japanese-style umbrella. Both the handle and ribs comprise bamboo. Japanese umbrellas have a large amount of ribs.

## Umbrella Scenes

### Walking with an Umbrella

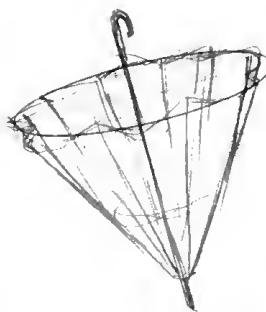
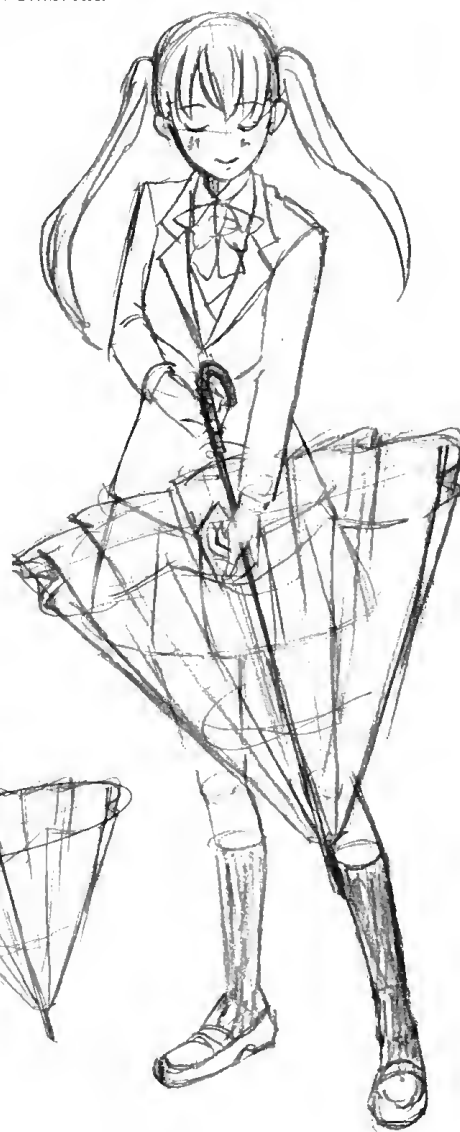


The woman leans her umbrella against her hip.



This woman carries the umbrella in her hand.

### Closing an Umbrella



### Opening an Umbrella



Running



This figure represents either a child or an abstracted, "mini character."

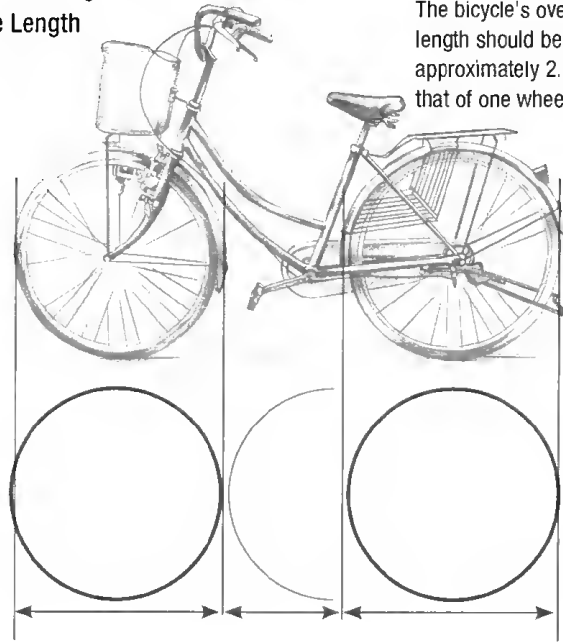
## Bicycles

Use the character and the bicycle's wheels to establish the length and height. Use the wheels' size as a standard for scaling the bicycle as a whole.



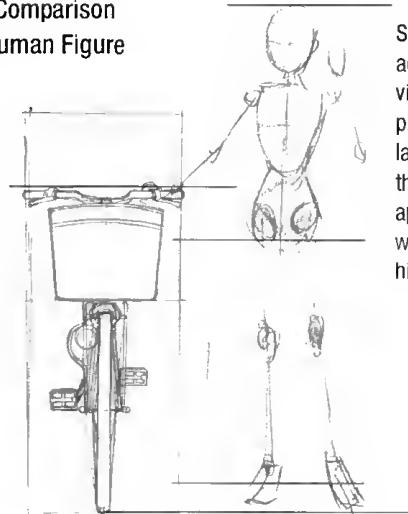
### Establishing the Length

The bicycle's overall length should be approximately 2.5 times that of one wheel.



### Scale Comparison with Human Figure

Size the bicycle according to the visual impression it projects. Sketch the layout positioning the handlebars approximately level with the character's hips.

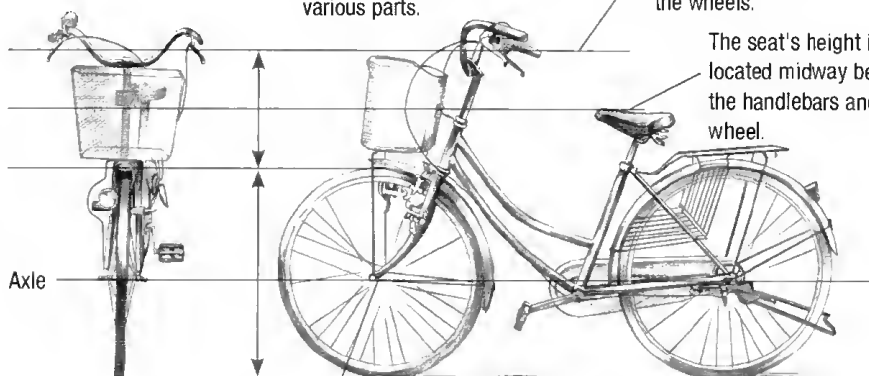


### Key Points in Portrayal

Draw front and profile views of the bicycle to establish the height and positioning of its various parts.

The handlebars are located one half wheel-length above the wheels.

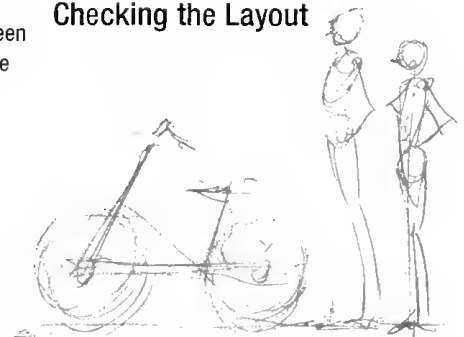
The seat's height is located midway between the handlebars and the wheel.



The axles are located at the wheels' centers.

The front and rear axles should be positioned along a straight, horizontal line.

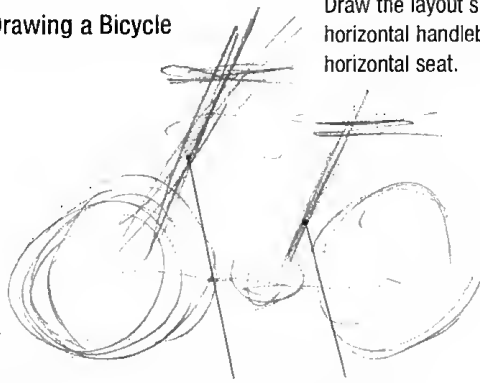
### Checking the Layout



The above shows a thumbnail sketch capturing the heights of the characters and the bicycle, before embarking on composing the actual drawing.

## Sketching Steps

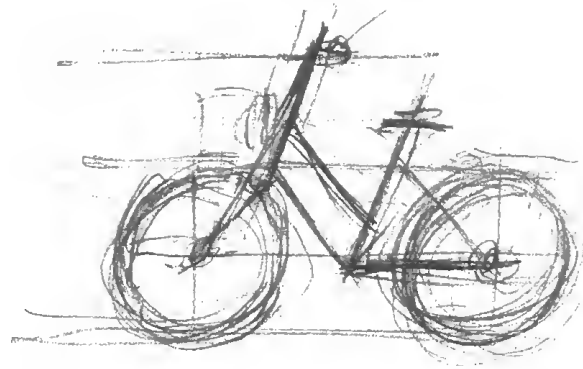
### Steps to Drawing a Bicycle



① Capture the form at the rough-sketch stage.

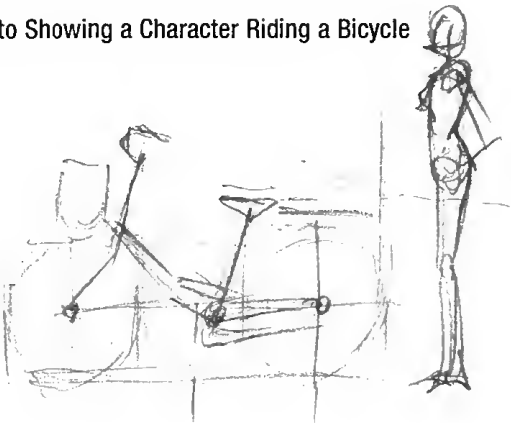
Use parallel lines for the frame's layout.

Draw the layout sketch with horizontal handlebars and a horizontal seat.

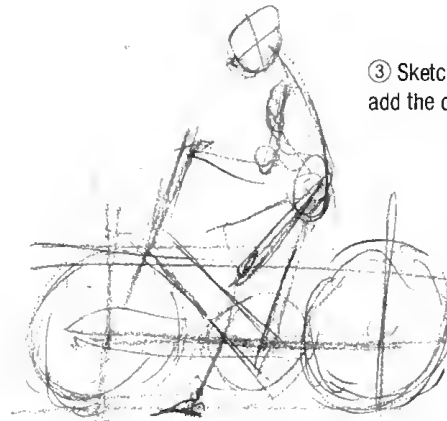


② Draw the wheels and the frame.

### Steps to Showing a Character Riding a Bicycle



③ Sketch the bicycle's layout and add the character.

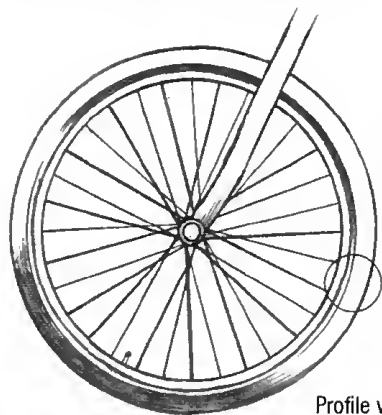


Establish the seat's position and determine the proportioning of the legs and figure in general, making sure that you center the figure's posterior.

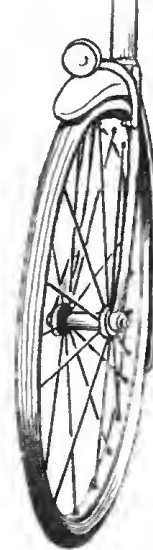
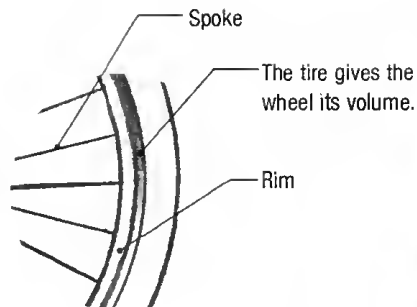


④ Final image

## Drawing Bicycle Wheels



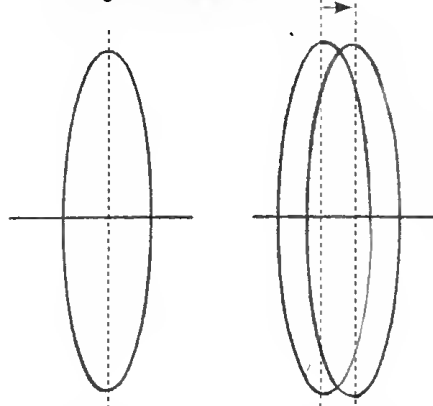
Profile view of wheel



Try your hand at drawing a wheel from this angle.



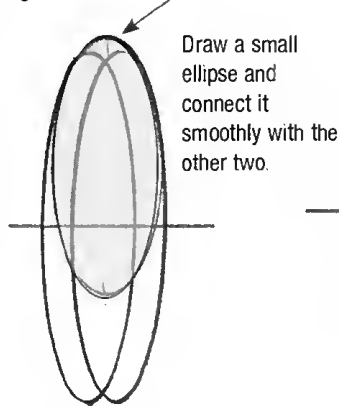
### Giving the Wheel Volume



① Establish the axle (centerline) and draw an ellipse.

② Draw the same ellipse once again slightly to the side of the first. This gives the wheel volume.

### Making a Tire



Draw a small ellipse and connect it smoothly with the other two.

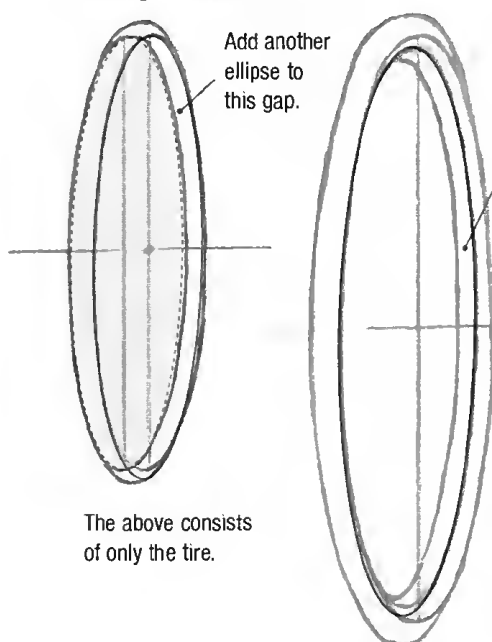
Now you have finished the tire.

Use a combination of ellipses to draw the wheel.



④ Repeat the same process for the wheel's bottom.

### Drawing the Wheel, Itself



Add another ellipse to this gap.

The rim appears underneath the tire.

The above consists of only the tire.

⑤ Add one more ellipse.

⑥ Add the axle (hub) and spokes to finish.



The above is a high-angle view of the rear wheel's hub.

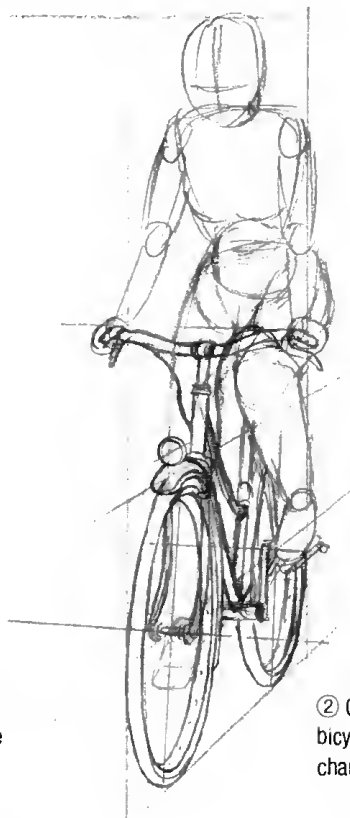
## Riding a Bicycle

Running

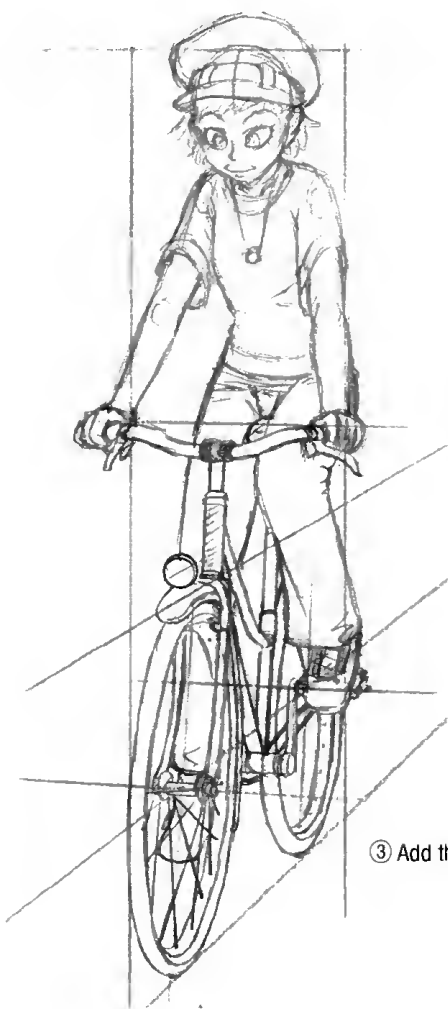
Moderate High Angle, 3/4 View



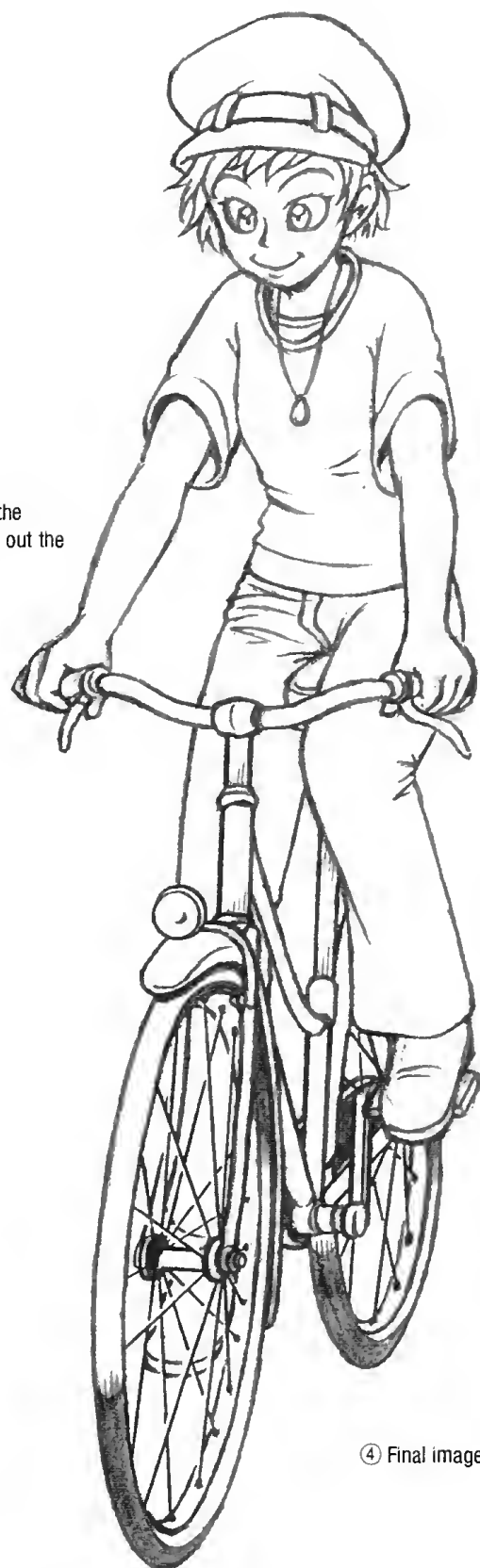
① Sketch a layout, using a block for the bicycle.



② Give form to the bicycle and flesh out the character.

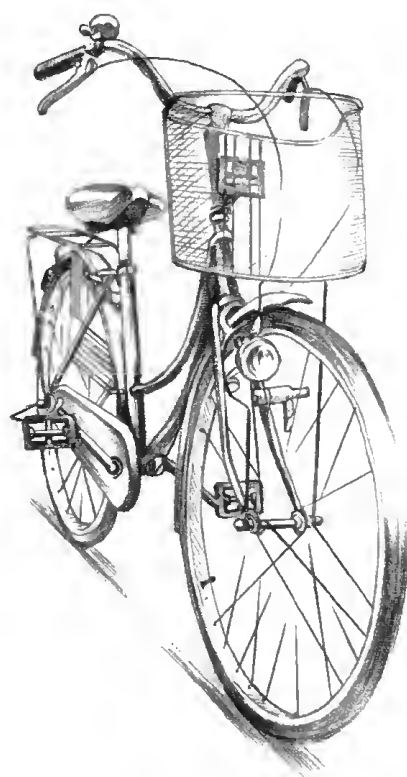


③ Add the details.

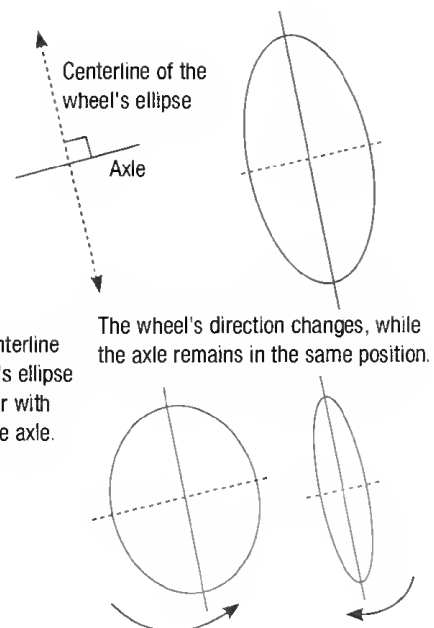


④ Final image





① Sketch a layout of the bicycle



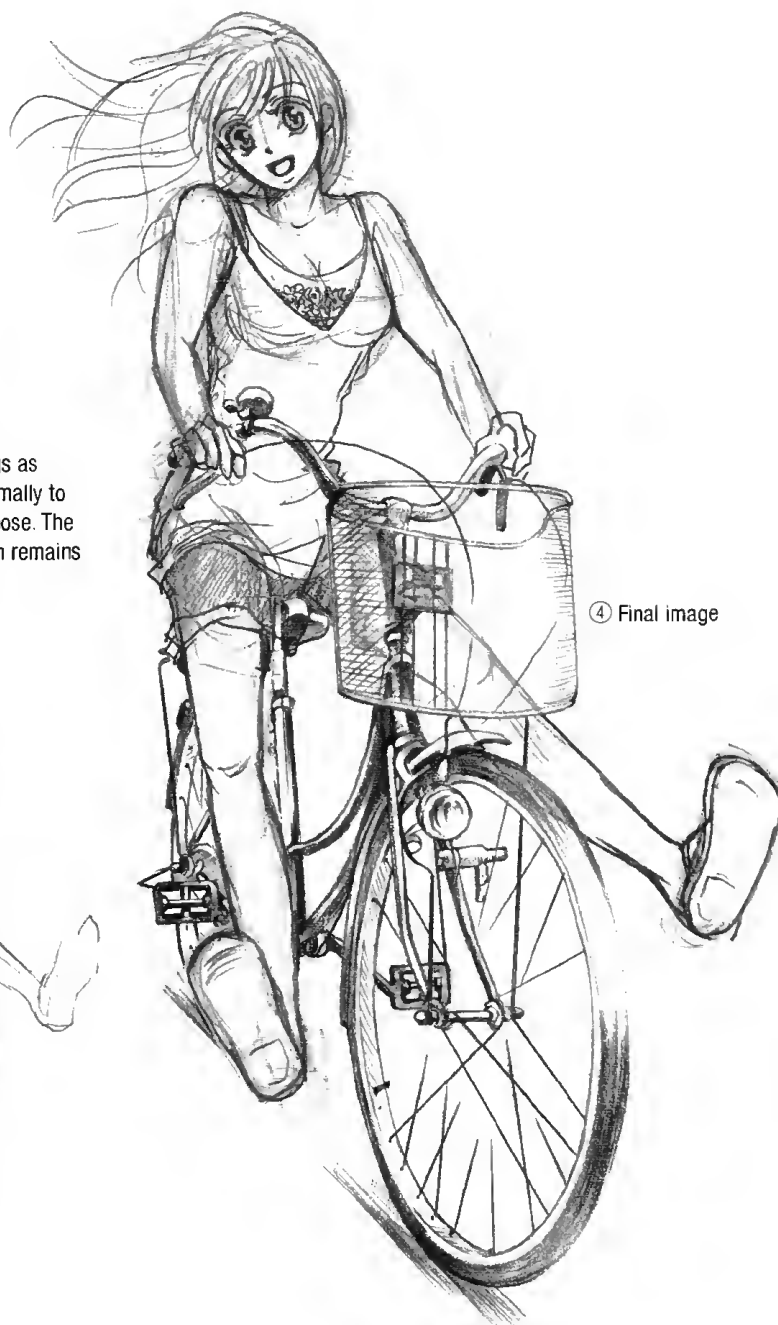
Draw the centerline of the wheel's ellipse perpendicular with respect to the axle.



② Sketch the layout of the character.



③ Draw the character's legs as you would normally to establish her pose. The groin's position remains the same.

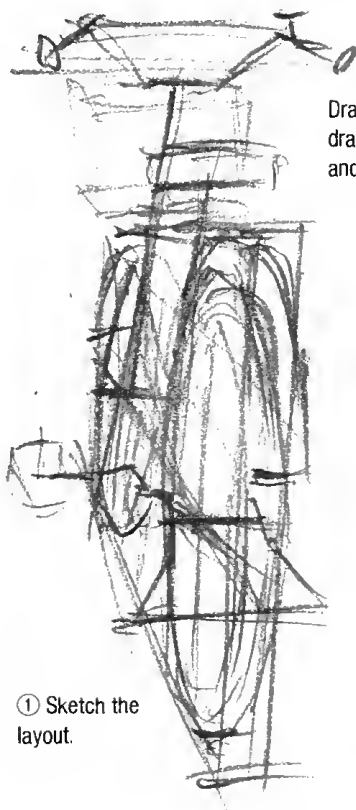
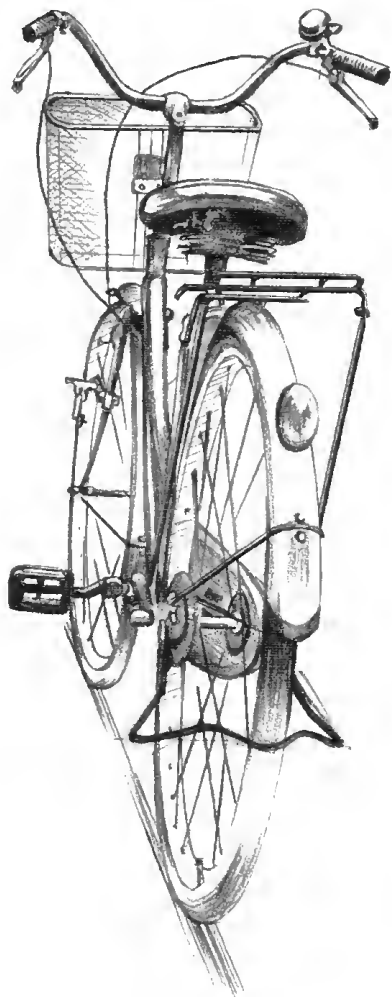


④ Final image



# Stopping a Bicycle and Looking Back

Moderate High Angle, 3/4 Rear View



Draw the handlebars (when drawing a front view), seat, and axles along parallel lines.

① Sketch the layout.



This shows a study of the pose.



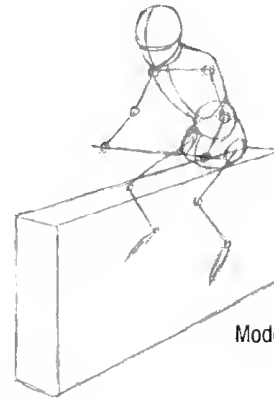
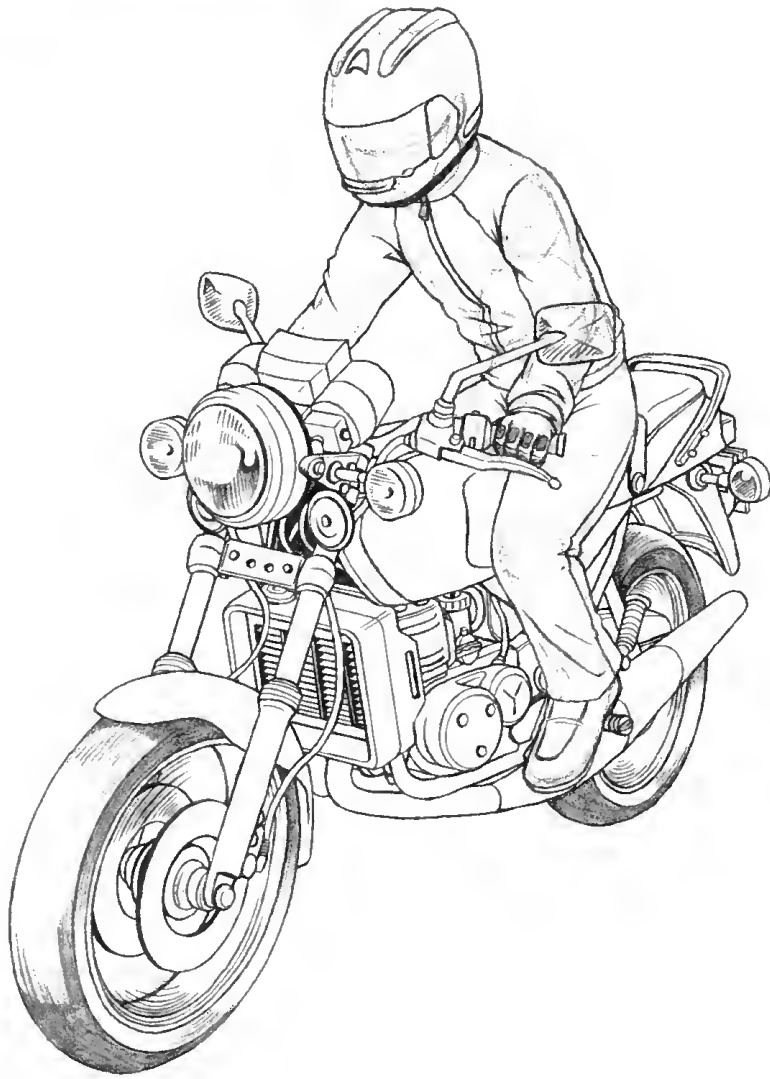
② Sketch the character.



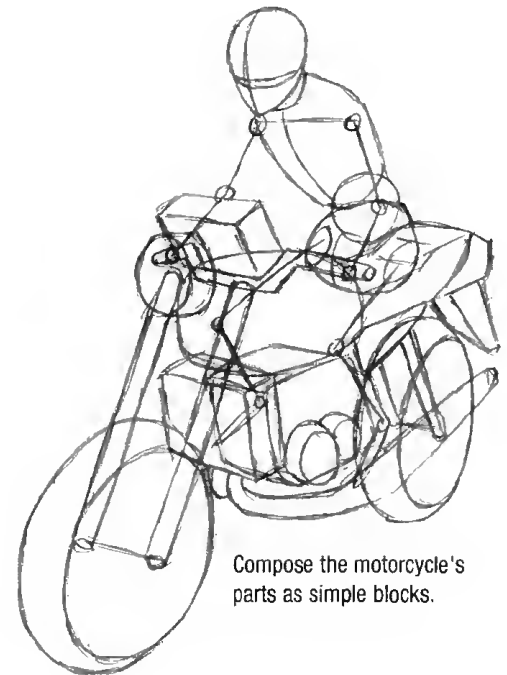
③ Final image

## Motorcycles

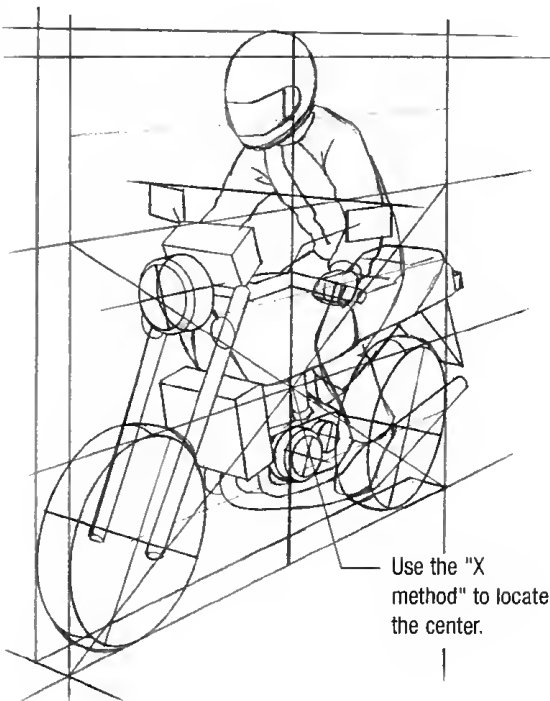
Draw the character astride a motorcycle as if he or she were astride a block.



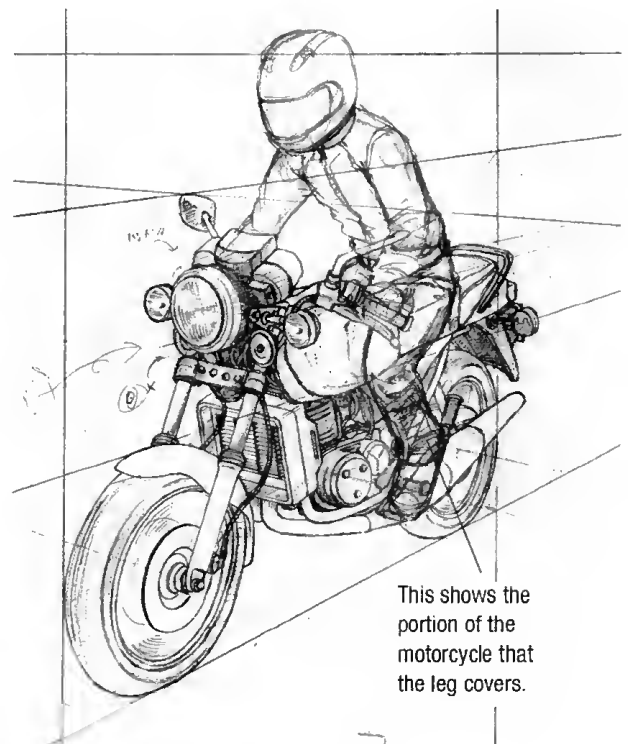
Model drawing



Compose the motorcycle's parts as simple blocks.

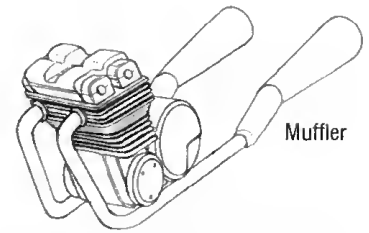
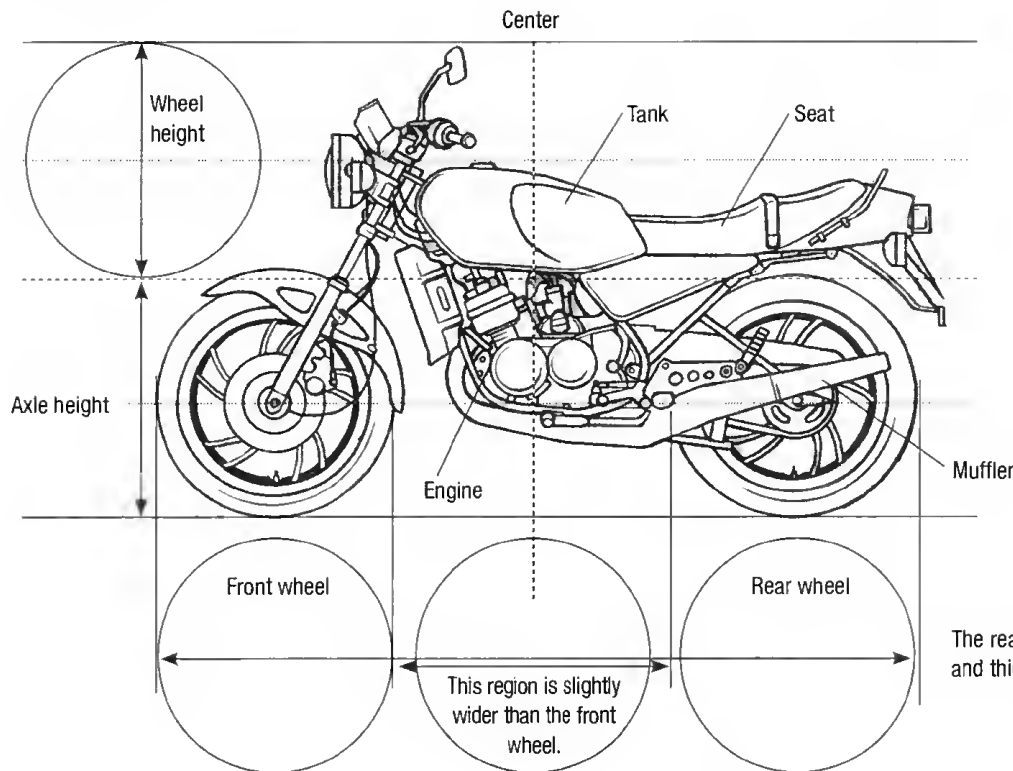


Use the "X method" to locate the center.



This shows the portion of the motorcycle that the leg covers.

## Proportioning



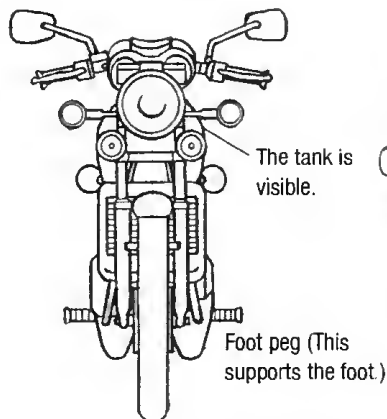
The above shows the engine, which is connected to the muffler.

Use the wheel size to scale the remainder of the motorcycle.

The rear wheel is slightly bigger and thicker than the front.

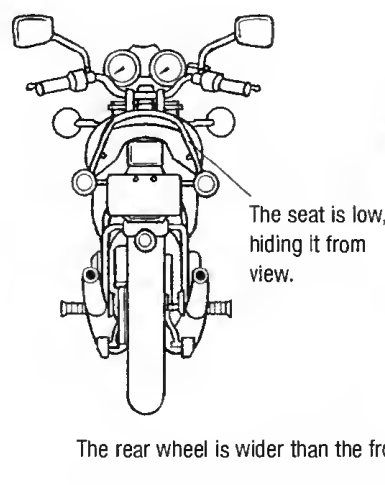


### Front



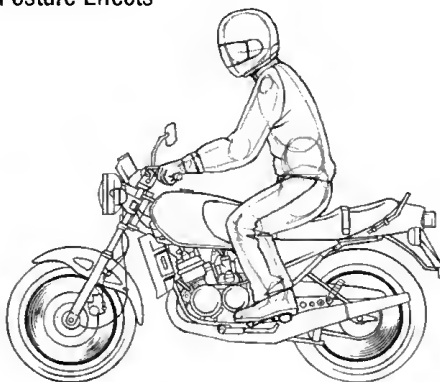
The front wheel is narrower than the rear; although, artists occasionally draw it on the thick side for visual purposes.

### Rear

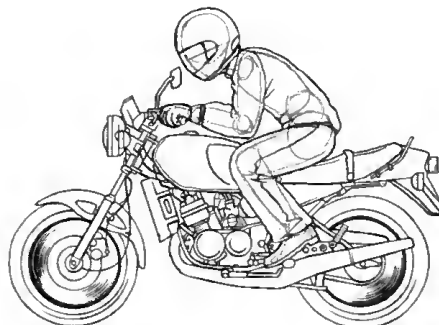


The rear wheel is wider than the front.

## Posture Effects



Normal riding posture

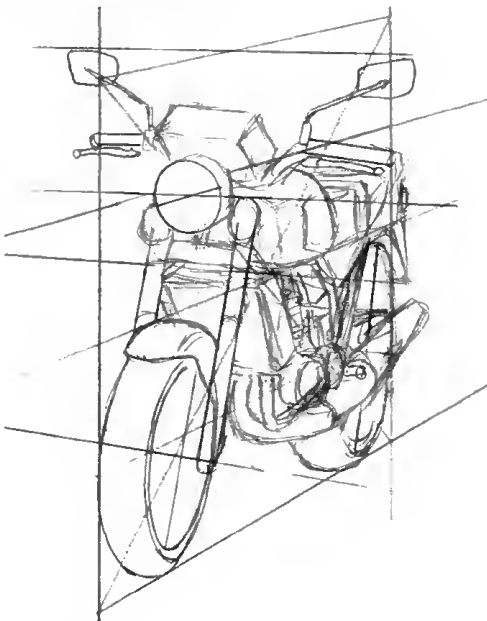


While this shows the same motorcycle and the same character, the character now leans forward, creating the illusion of speed.

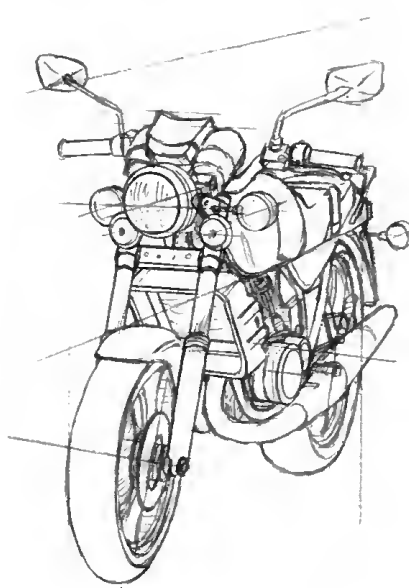


Ref.: This shows a motorcycle with a cowl covering the front. The cowl blocks the entire engine from view.

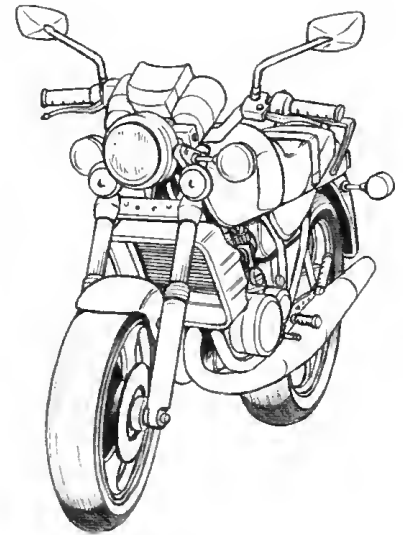
## Sketching Steps



① Draw vertical and horizontal lines to use as bases for composing as you draw the motorcycle. Render the various motorcycle parts as blocks.

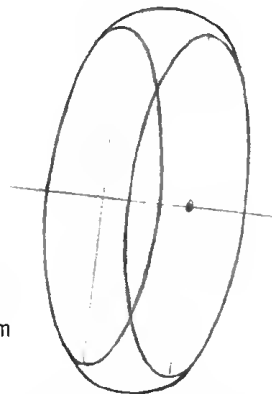
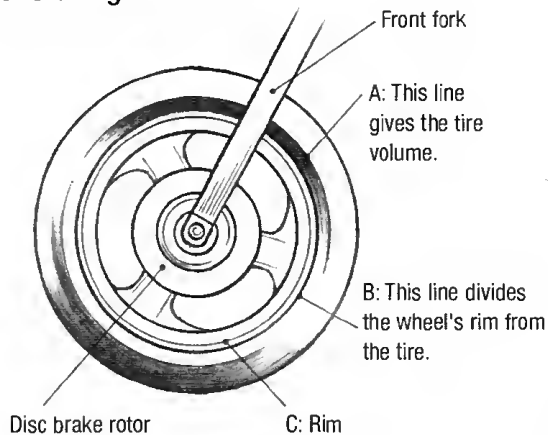


② Clean up the shapes of the various parts.

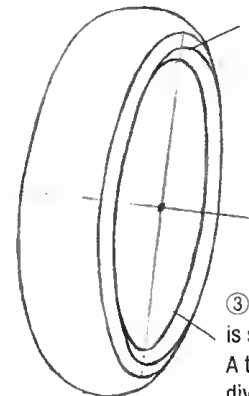


③ Adjust the contour lines and add the details. Add shading around the engine and to the wheels to finish.

## Sketching the Wheels

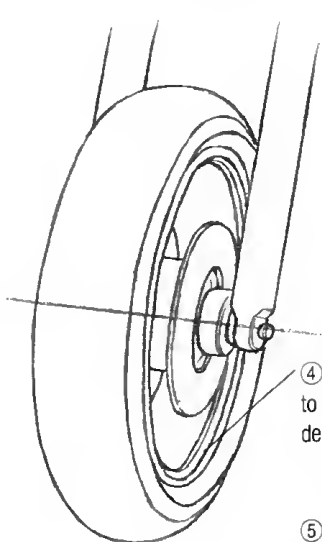


① Draw the tire. (Follow the same steps outlined for a bicycle wheel.)



② Draw an ellipse to create line A, which gives the tire volume.

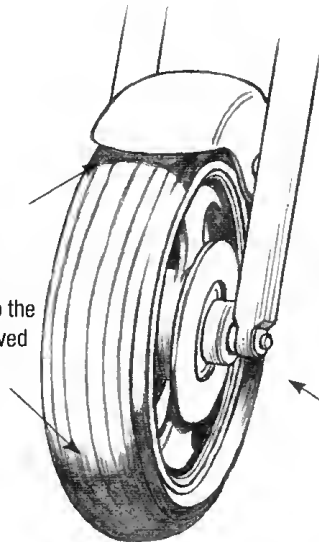
③ Add another ellipse that is slightly smaller than A to create line B, which divides the tire from the metal rim.



④ Draw an ellipse to create C, which defines the rim.

⑤ Add the disc brake rotor, the front fork, and other parts.

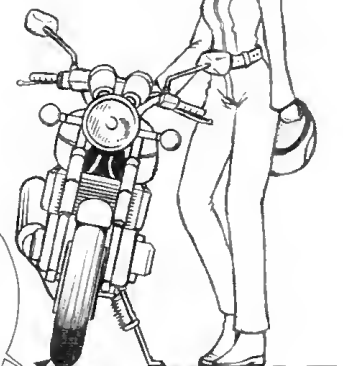
Make the shadows' contours adhere to the tire's curved surface.



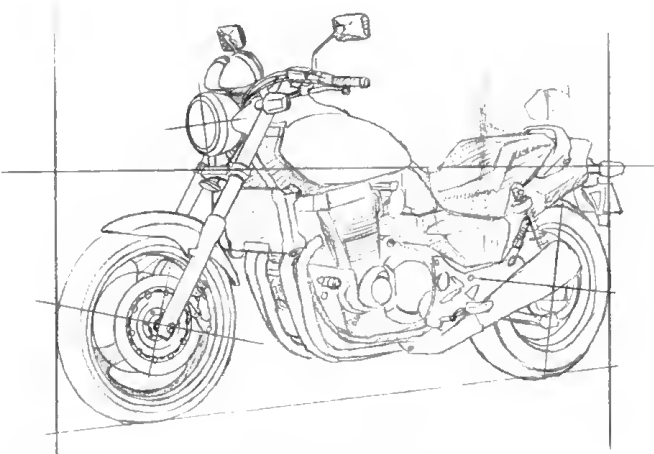
⑥ Add shading to finish.

Motorcycles should appear tilted when they are parked.

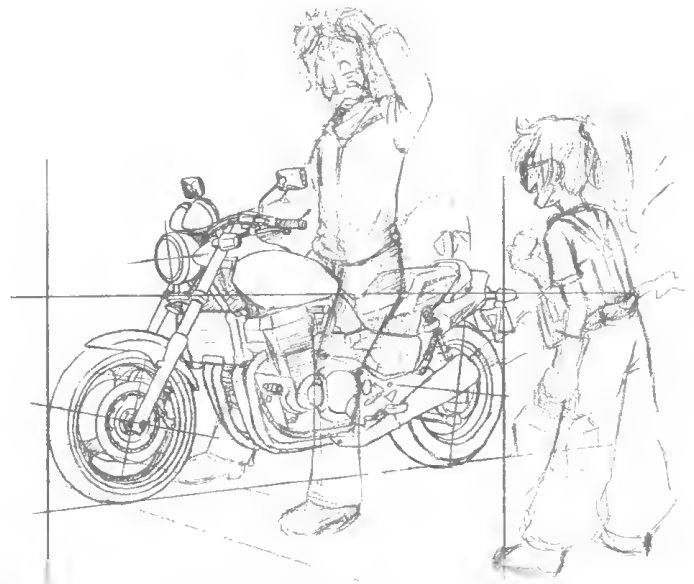
This shadow gives the wheel a sense of weightiness and presence.



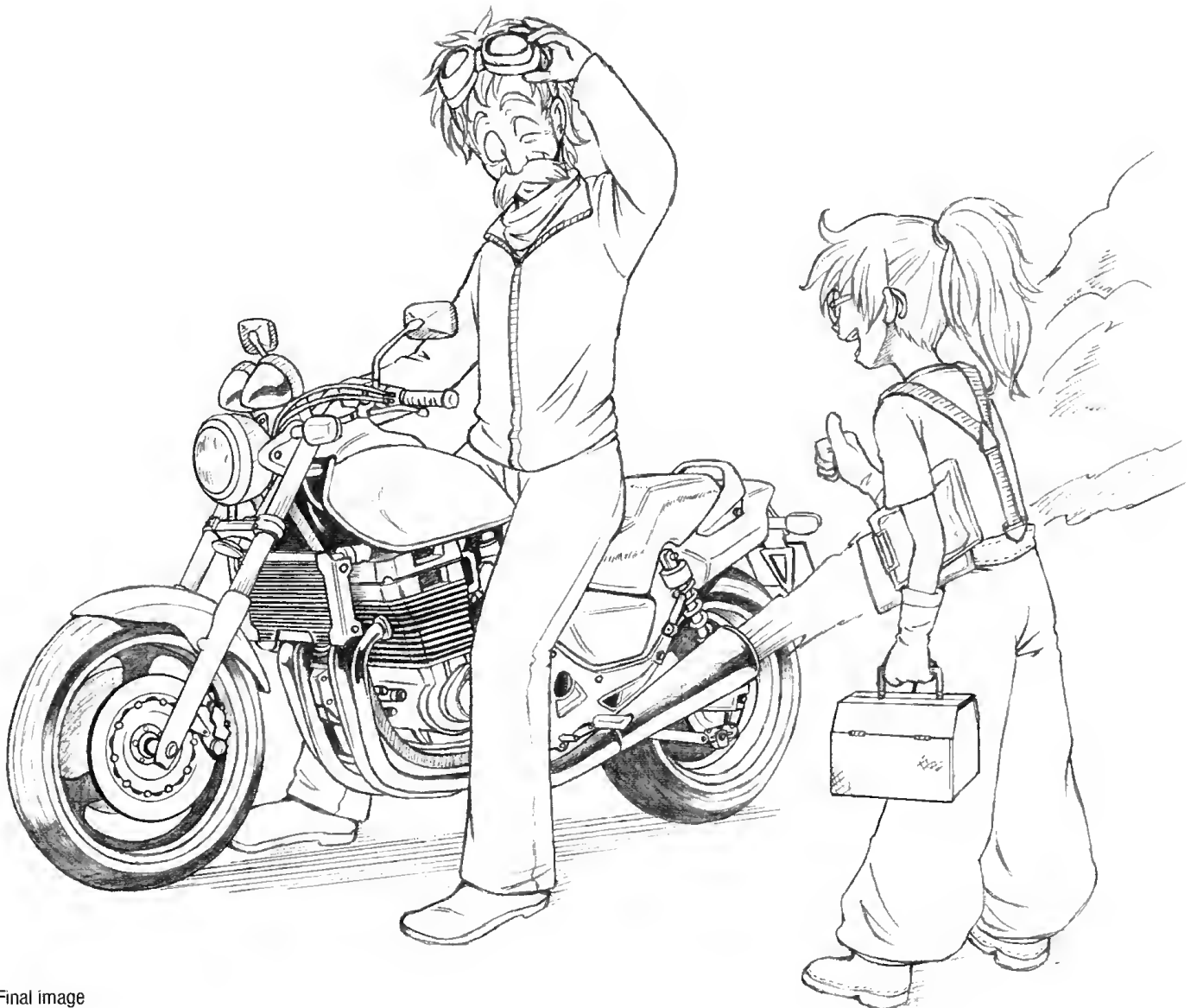
## Riding a Motorcycle



The above shows line drawing of a motorcycle.



Draw the character with one leg on each side of the motorcycle. Both feet should be able to touch the ground comfortably. Position the character's groin and hips to match the motorcycle's height and then compose the remainder of the figure.



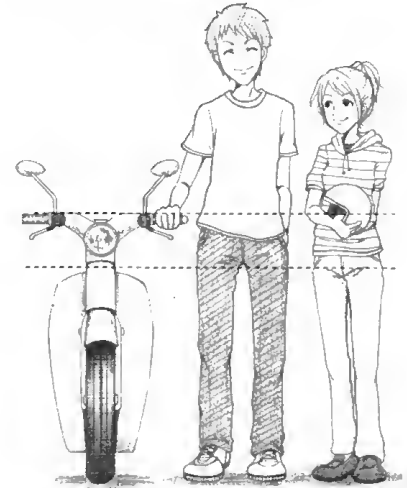
Final image

## Scooters

Use the wheel size as a basis for composing the drawing.

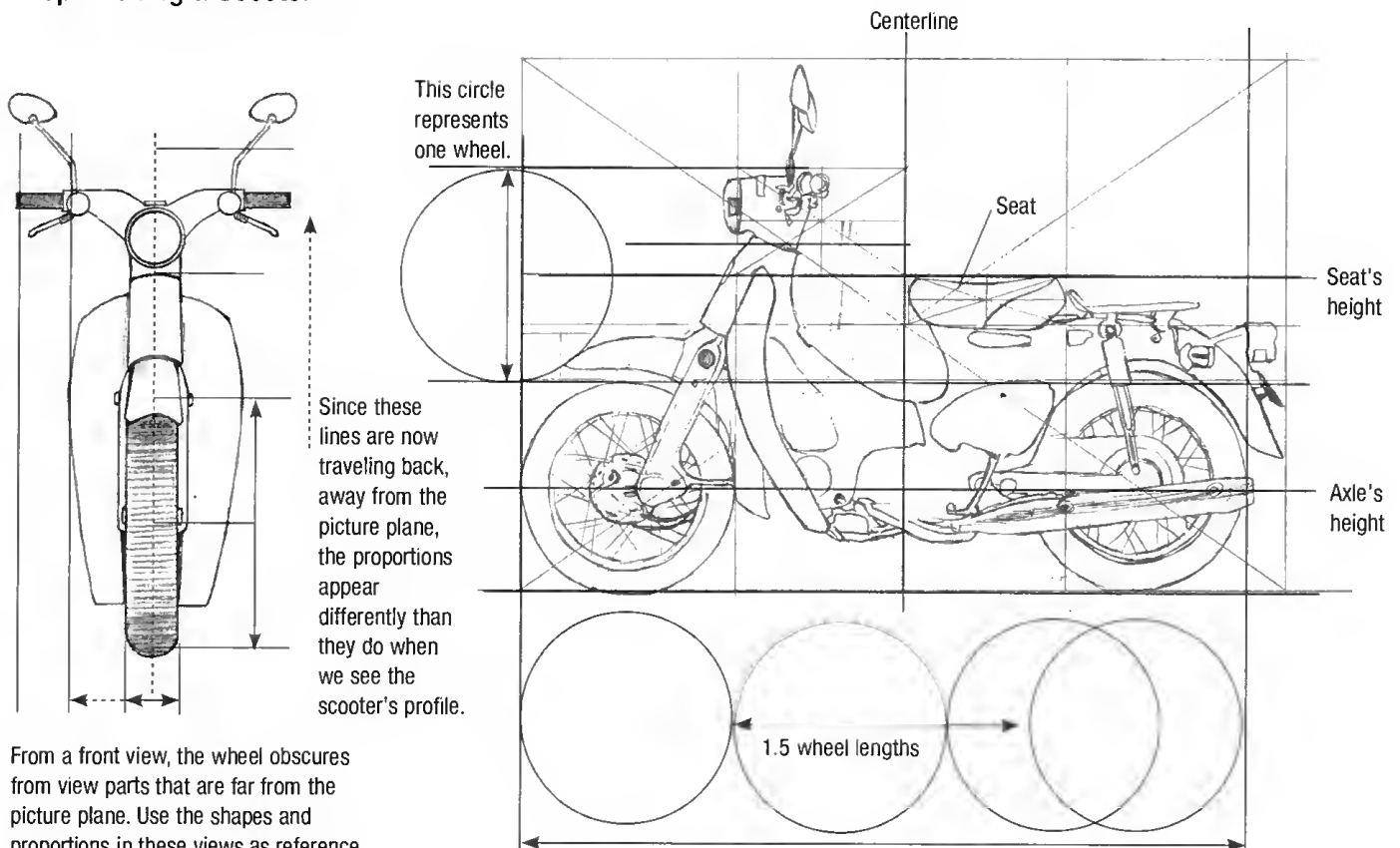


### Scale Comparison



Proportion the scooter to match the human figures in the composition. Position the scooter's handlebars approximately level with the human figures' groins.

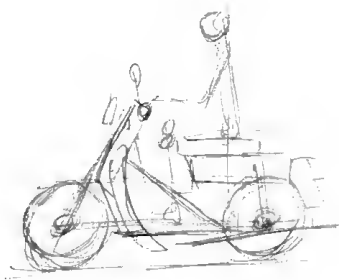
### Proportioning a Scooter



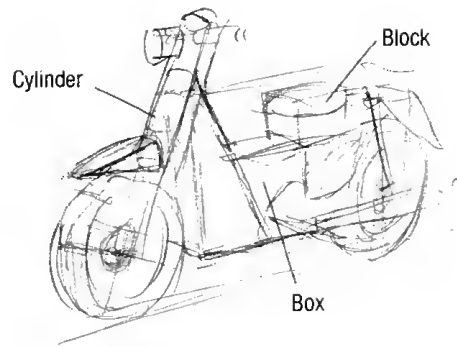
From a front view, the wheel obscures from view parts that are far from the picture plane. Use the shapes and proportions in these views as reference and maintain awareness of perspective.



## Sketching Steps



① Produce a thumbnail sketch.



② Draw a rough sketch of the scooter.



Draw the frame and the fender.



③ Sketch a layout of the character.

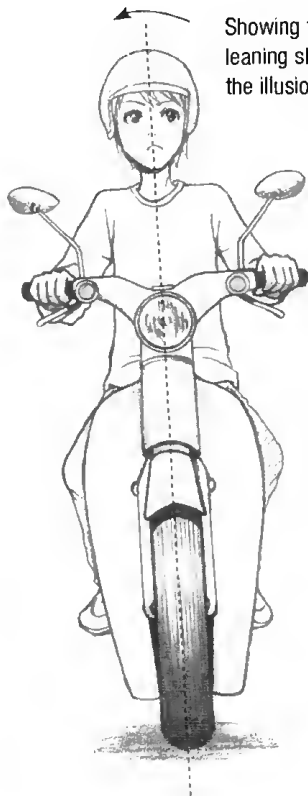


④ Flesh out the character, capturing the overall form.

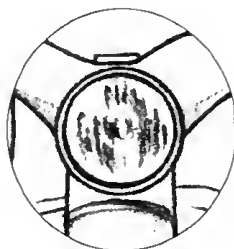


⑤ Final image

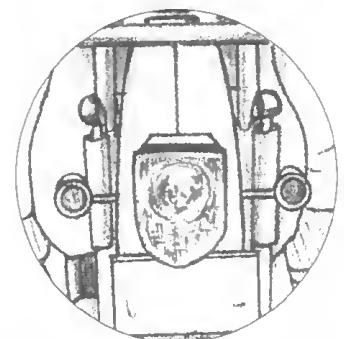
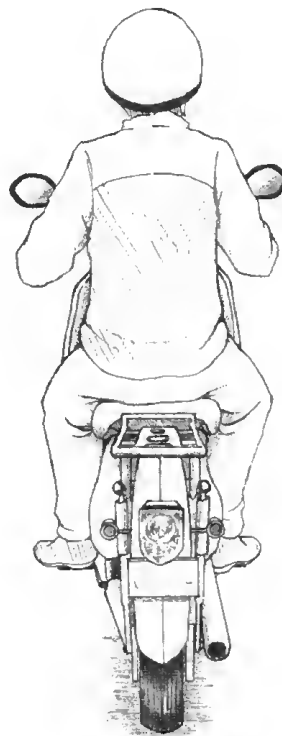
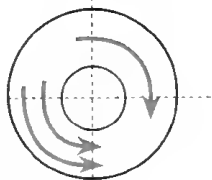
## Key Points in Portrayal



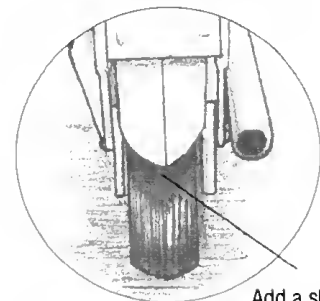
Showing the character leaning slightly creates the illusion of speed.



Use hatching on the headlight to evoke the texture of glass.



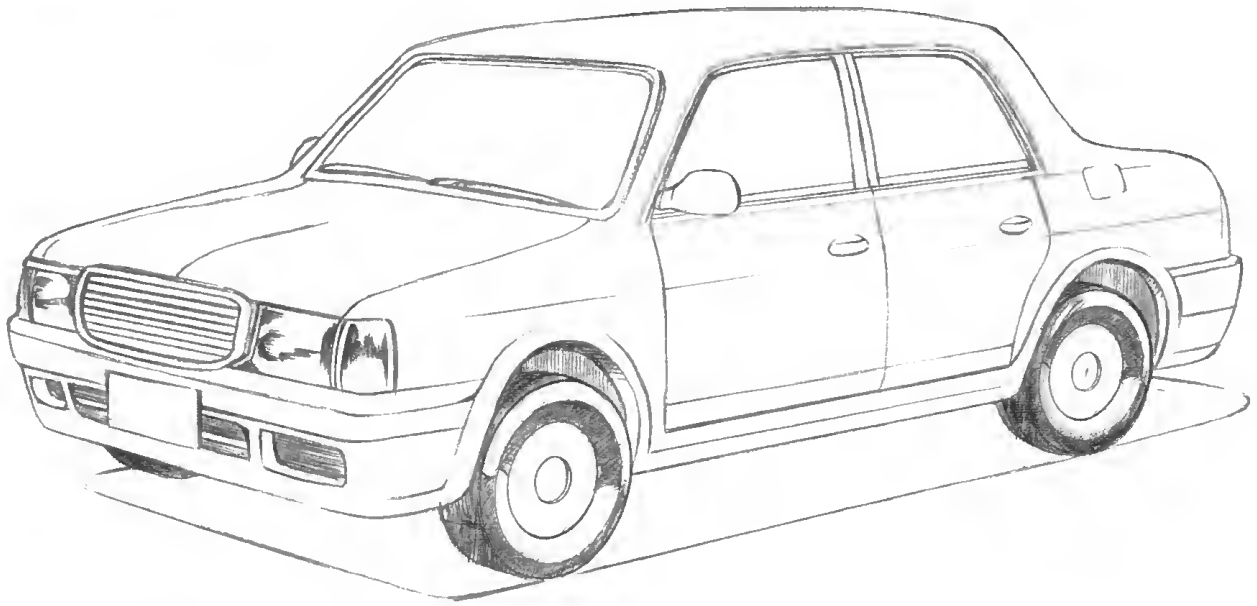
To make the taillights, use a broken exterior contour and add hatching to create a play of light and dark.



Add a shadow that mimics the fender's shape.

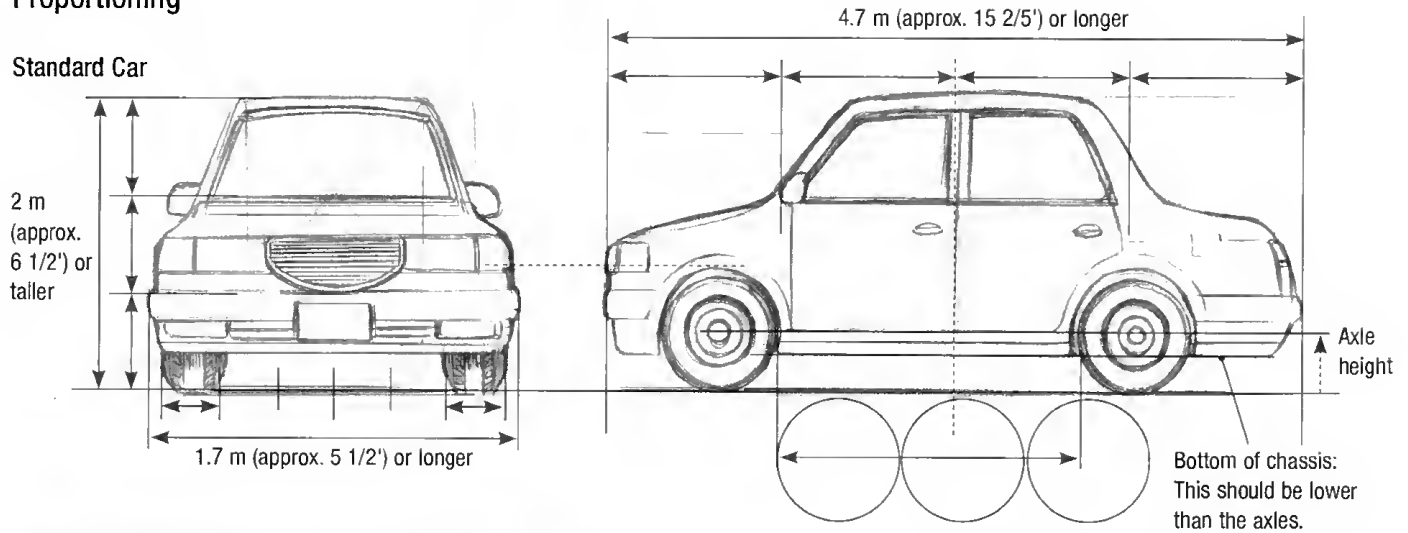
# Cars

Draw the entire car so that it fits within a box. Draw the vertical wheels so that they lie perpendicular to the car's axles.



## Proportioning

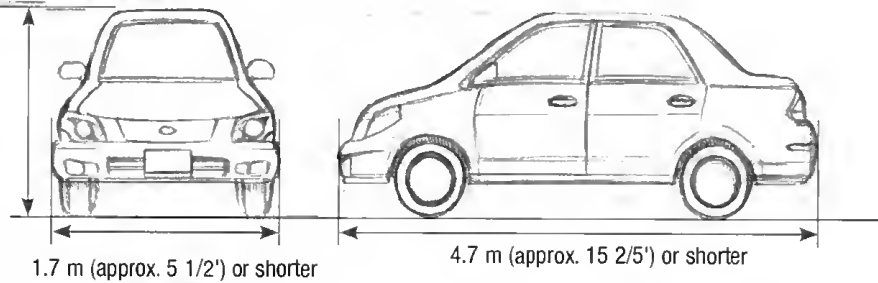
### Standard Car



## Compact Cars and Subcompact Cars

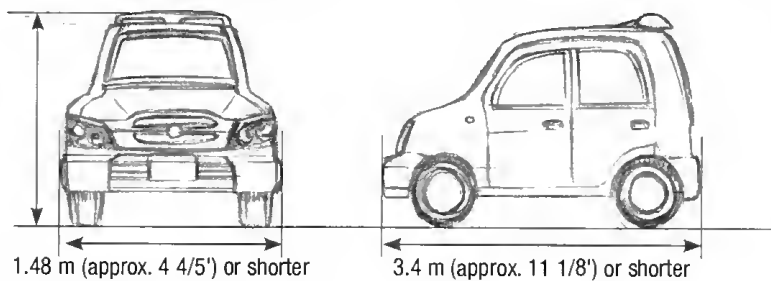
### Compact Cars

1.6 m (approx. 5 1/4') to 2 m (approx. 6 1/2') or shorter



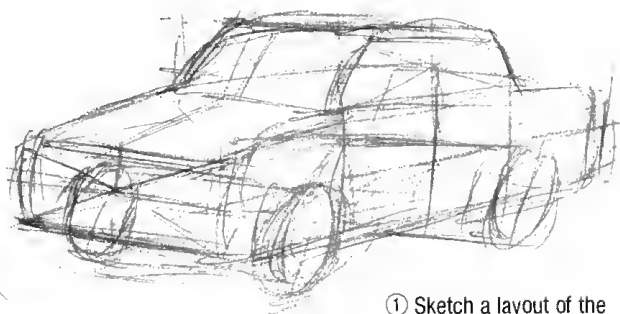
### Subcompact Cars

2 m (approx. 6 1/2') or shorter

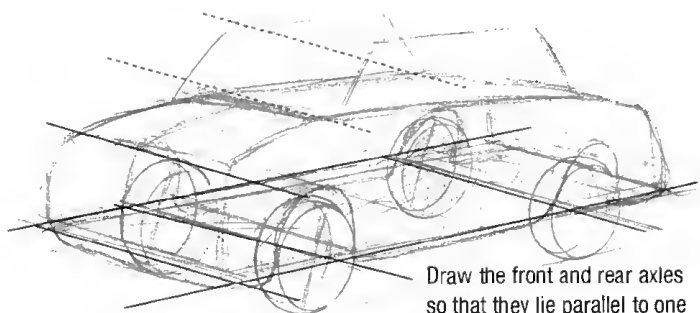




## Sketching Steps



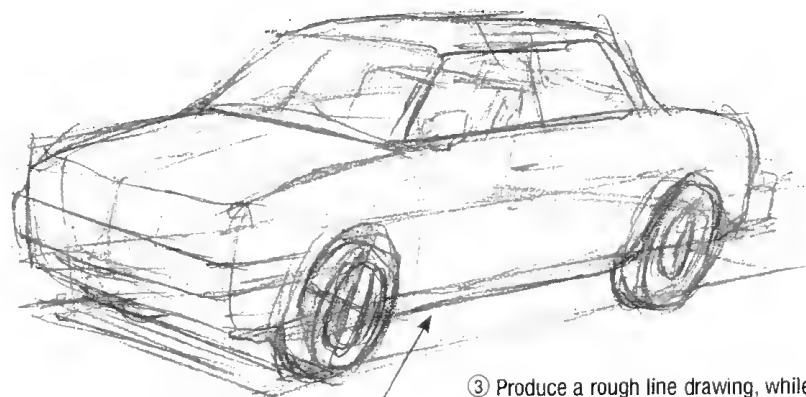
① Sketch a layout of the overall car based on the image in your mind's eye.



The axle lines connect the centers of the wheels.

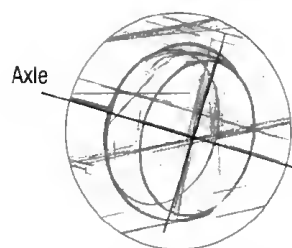
Draw the front and rear axles so that they lie parallel to one another.

② Draw block layouts of the body and windows, using the chassis as a basis.

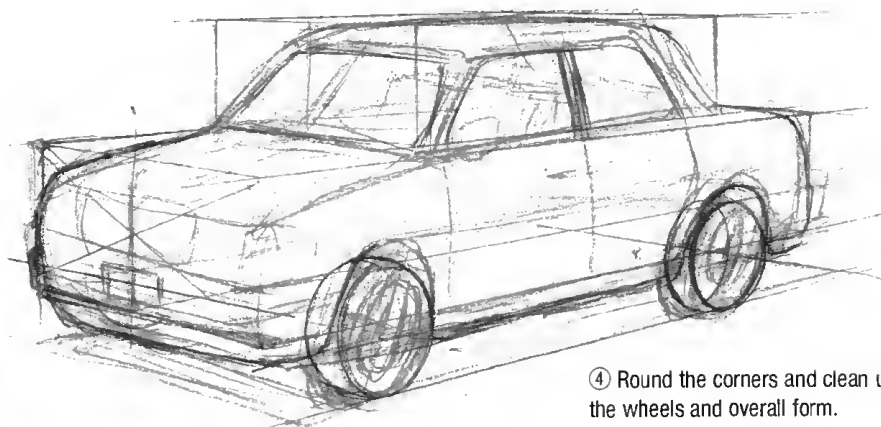


Draw the chassis's base line lower than the axles.

③ Produce a rough line drawing, while adding a quick and crude sketch of the interior.

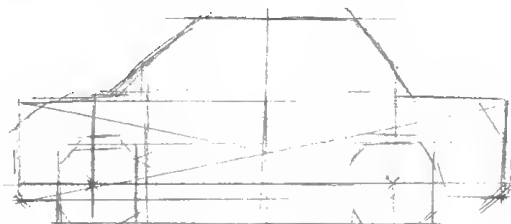


Draw a vertical centerline of the wheel ellipse that lies perpendicular to the axle.



④ Round the corners and clean up the wheels and overall form.

## Key Points in Portrayal



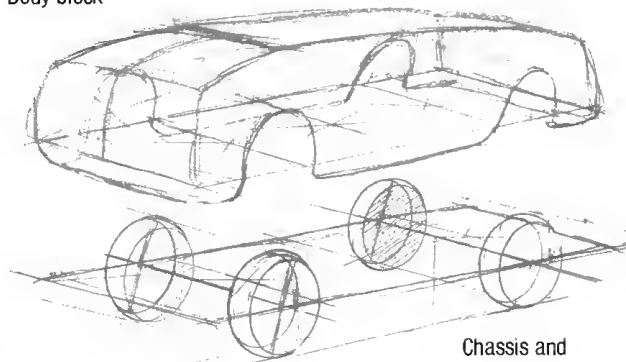
Balance the car's proportioning from a profile view.

### • Capturing the Forms Using Large Blocks

Roof and window block



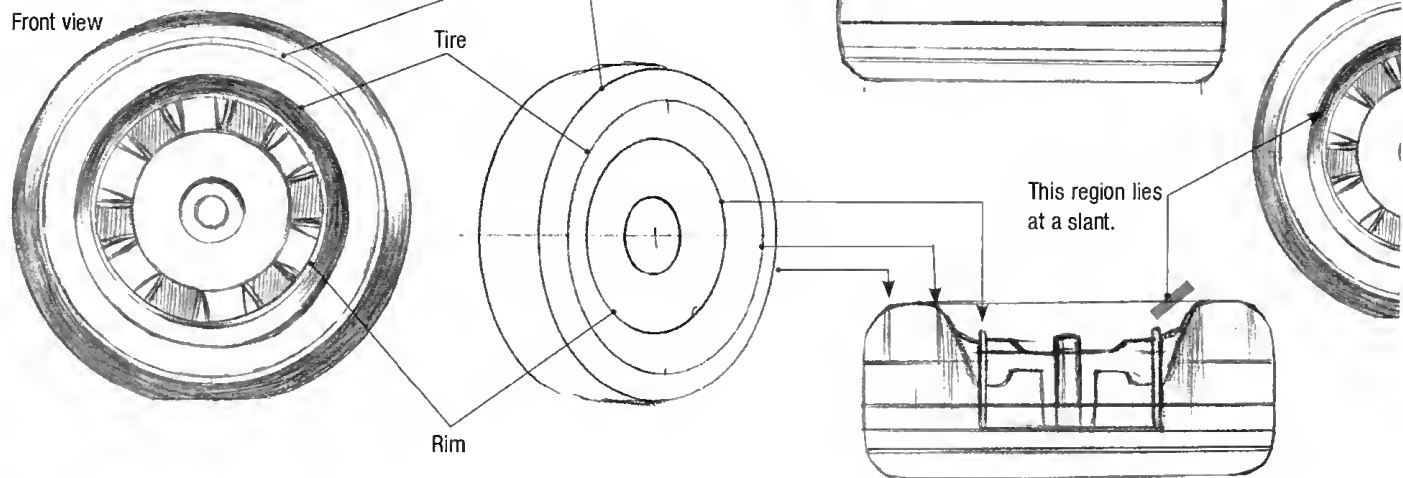
Body block



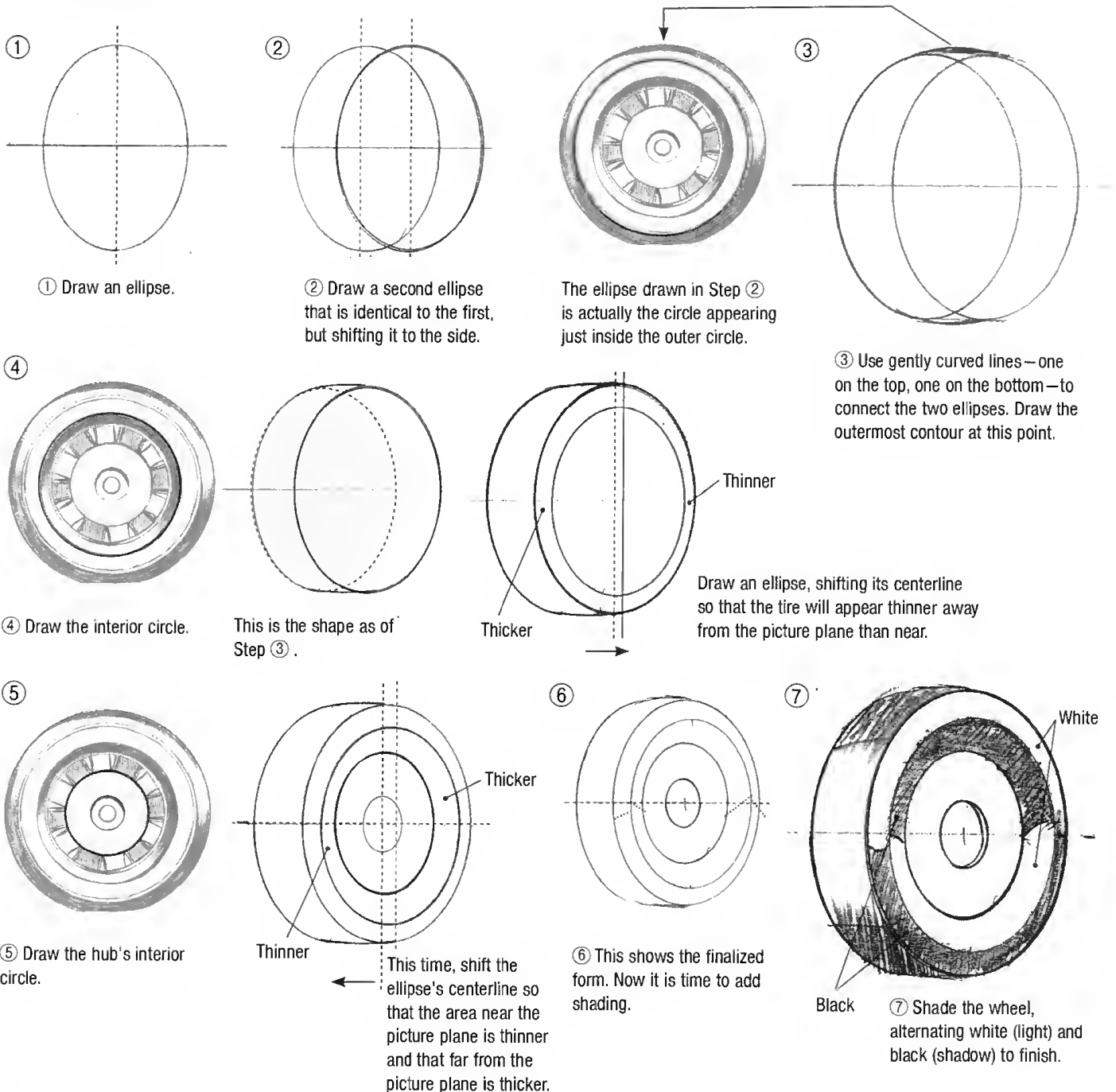
Chassis and wheel block

## Sketching Wheels

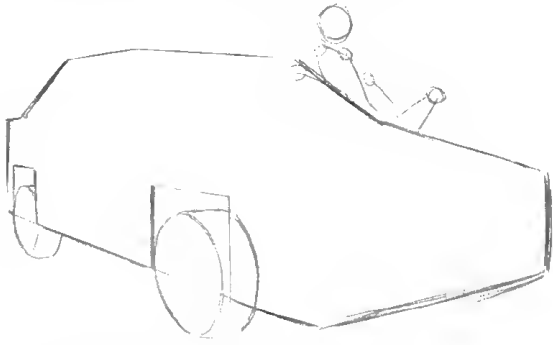
### Know the Meaning of Each Line



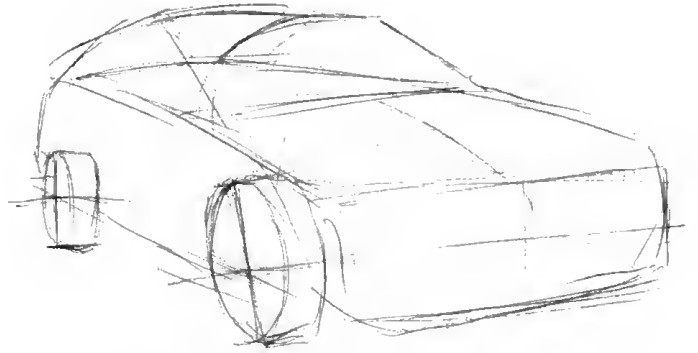
### Sketching Steps



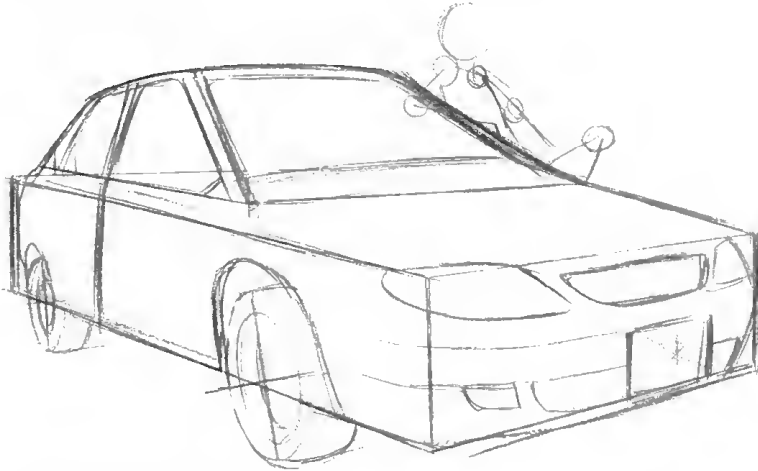
## Producing a Line Drawing of a Car



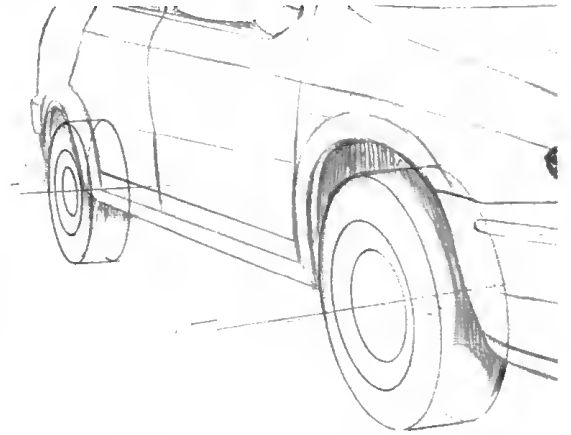
① Sketch the silhouette of a car based on how you envision it.



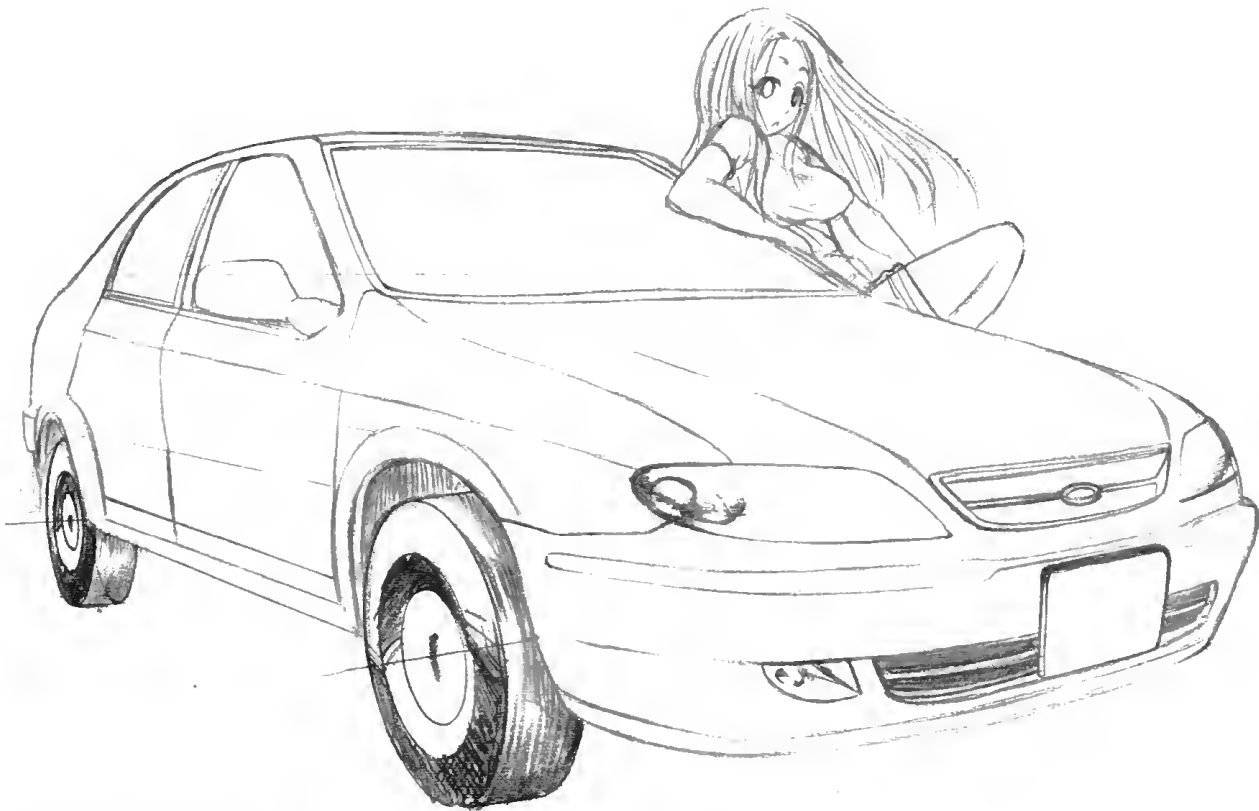
② Give the body form and establish the directions that the axles face. Sketch layouts of the wheels.



③ Clean up the contours.



④ Add the wheels to match the axles' positions.



⑤ Fill in the details and add the character to finish.

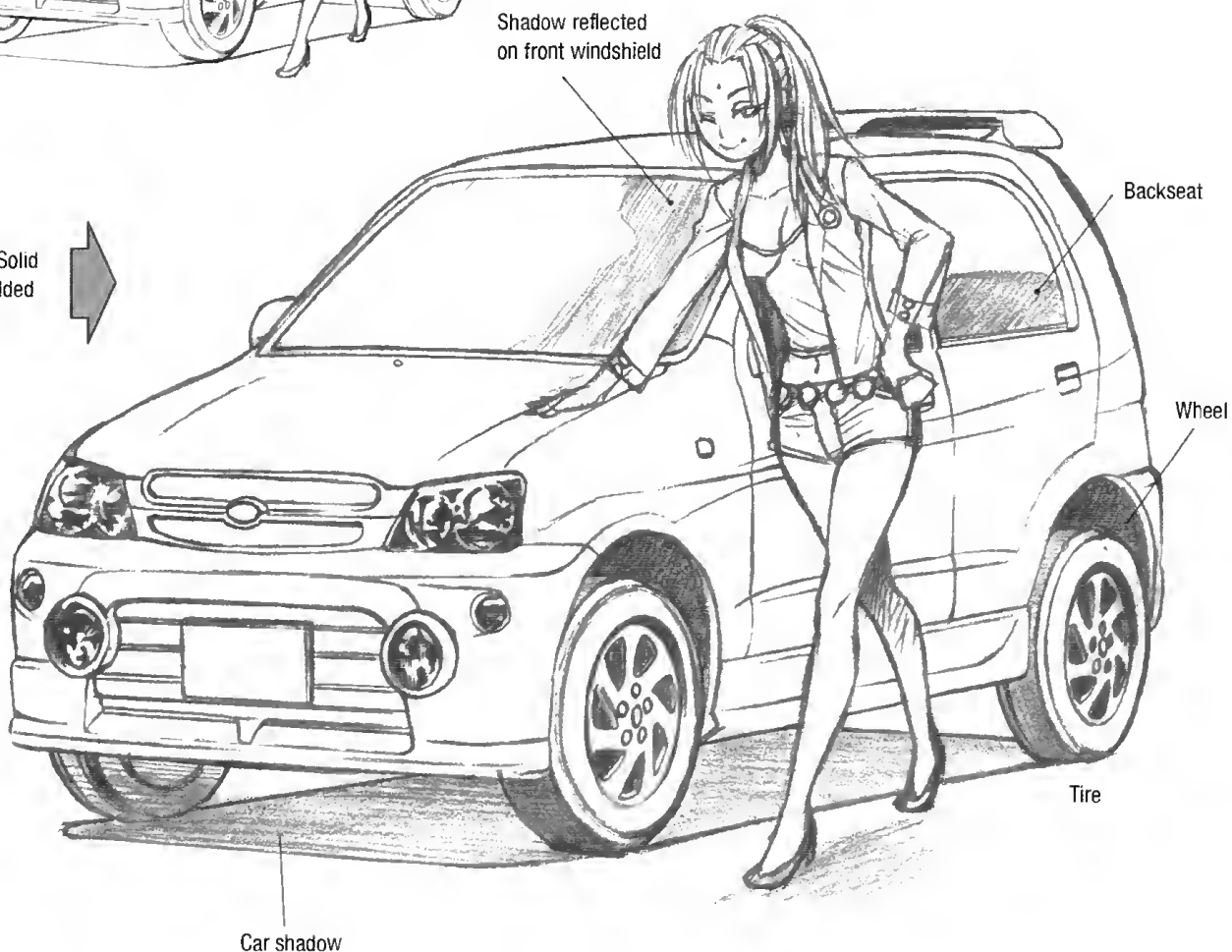
## Spotting Blacks

Line Drawing with  
Minor Shading

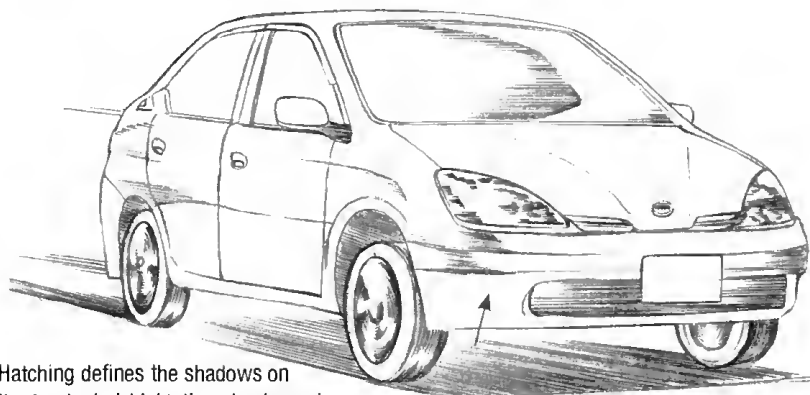


Adding solid black (black fill) will give the car an extra sense of weight and presence.

Car with Solid  
Blacks Added



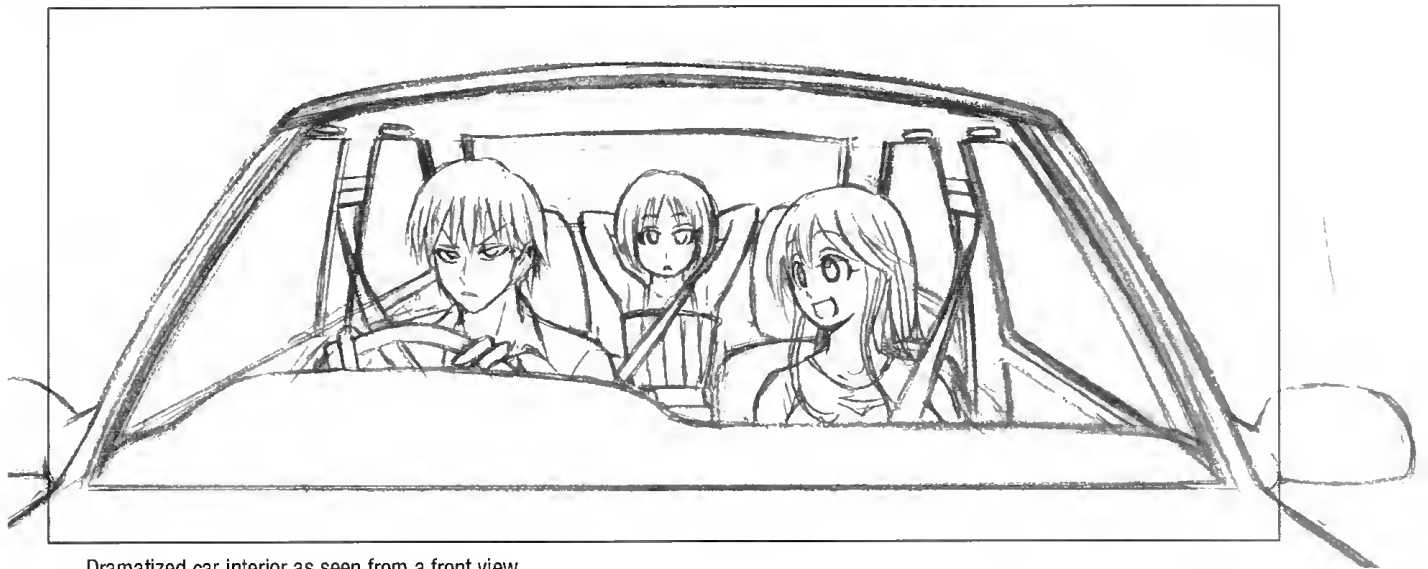
## Using Diagonal Hatched Lines to Portray Speed



Hatching defines the shadows on the front windshield, the wheels, and underneath the car in the above image.

Using diagonal hatching on the front of the car and each corner gives effective results.

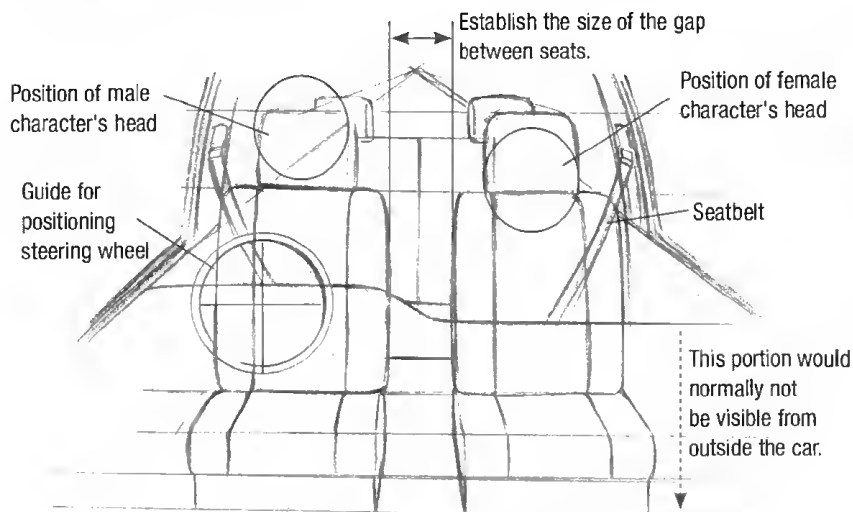




Dramatized car interior as seen from a front view

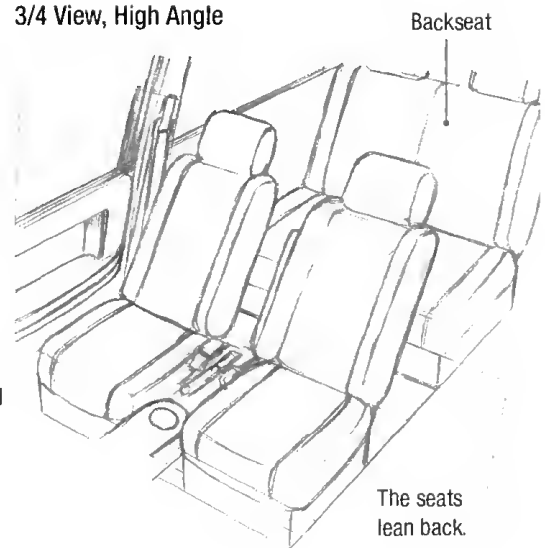
## • Basic Car Interior Structure and Key Points in Portrayal

### Front View, Moderate High Angle



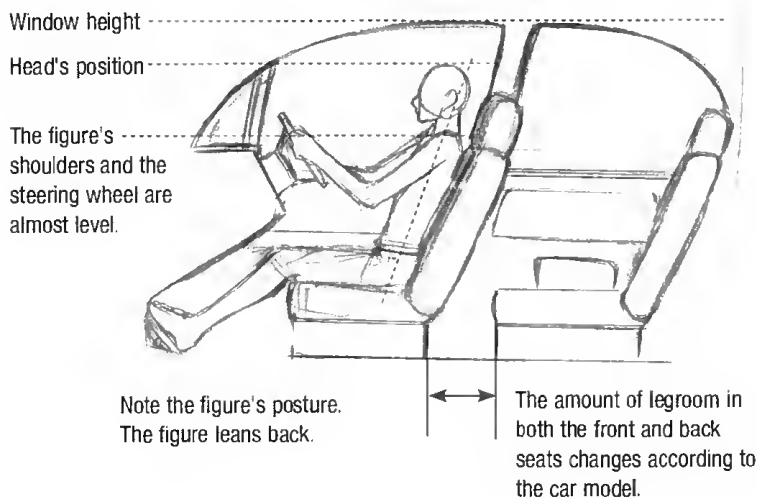
The seats are spaced apart. The characters cannot sit so that they touch one another.

### 3/4 View, High Angle



### Profile View

Establish the windows' sizes.

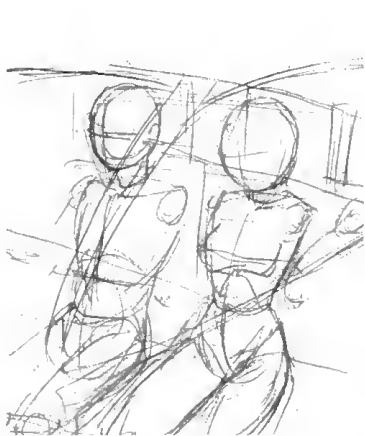




This composition draws attention to the woman in the driver's seat.



We see the characters virtually in profile. The differences in head sizes between the two characters give us a sense of depth.



The above sketch is composed from a high angle. There is relatively no difference in size between the two characters.



This composition draws attention to the woman in the passenger seat.



## Chapter 4

# Spicing up a Scene with Weapons



# Weapons That Narrate a Setting

Swords and guns frequently appear in action and fantasy settings. The kind of weapon that a character wields gives enough information to tell the reader about the environment, world, or age in which a character lives or his or her national culture.

## Real World-based Scene

The character seen might have "found" or was "given" the weapon or is a military person of some kind. While the setting has endless possibilities, it still requires research.







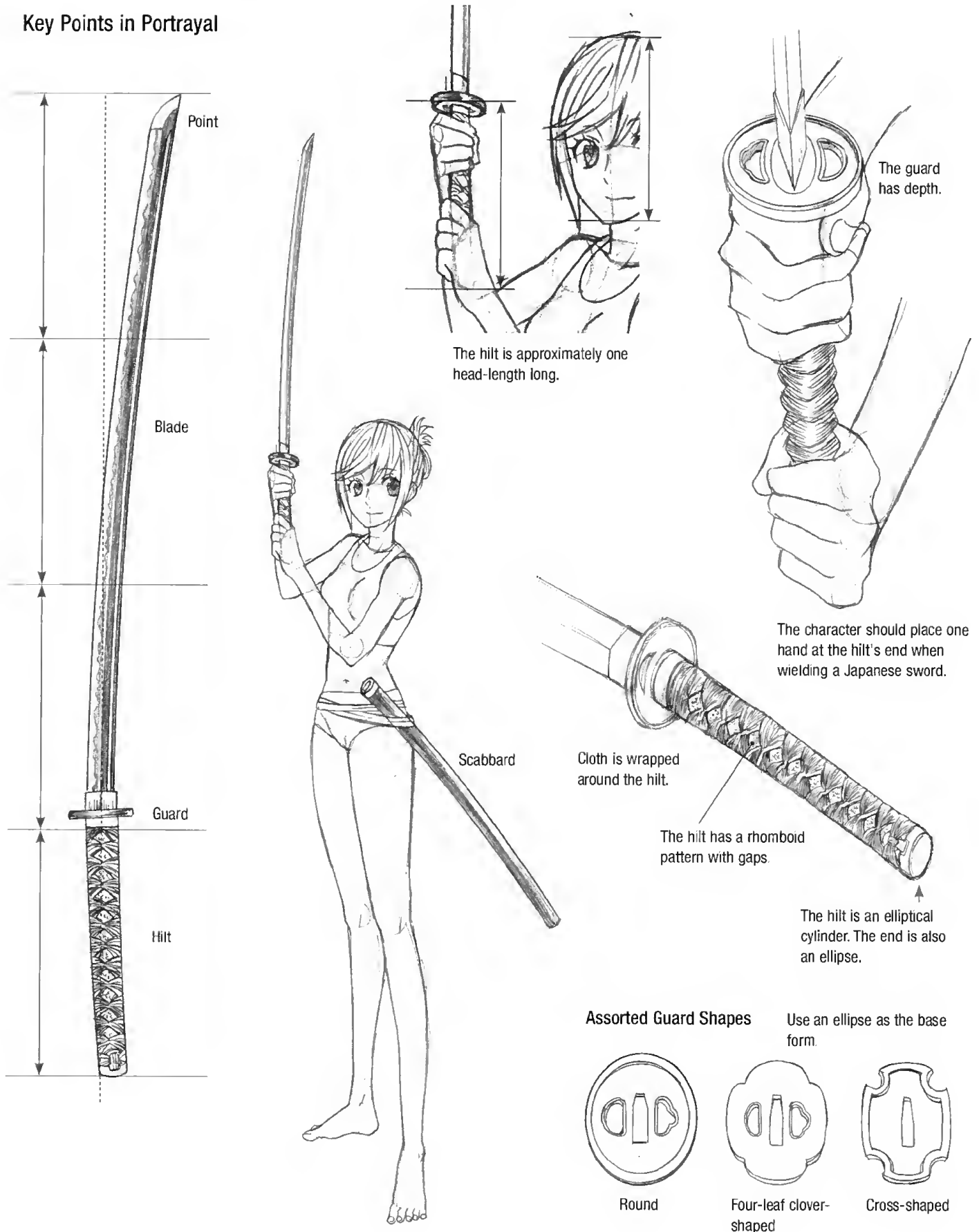
# Sketching Swords and Blades

Swords comprise three parts: a blade, a guard, and a hilt. The appearance of the hands as they grip the hilt is crucial.

## Japanese Swords

Japanese swords are not straight. Envision a bow's silhouette when drawing.

### Key Points in Portrayal

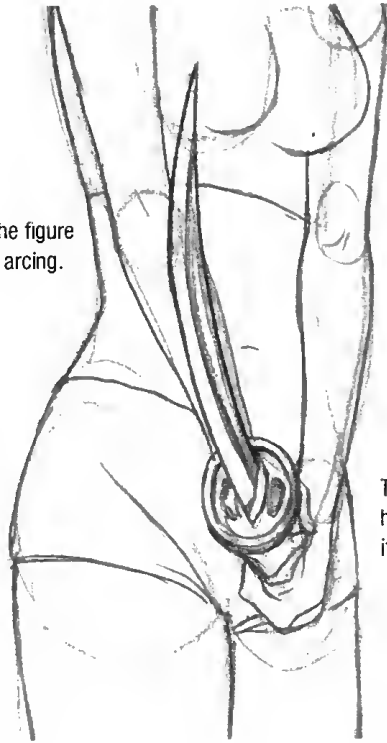


## • Wielding a Sword

Front

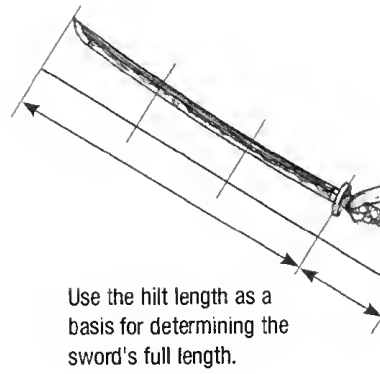


Show the figure slightly arcing.

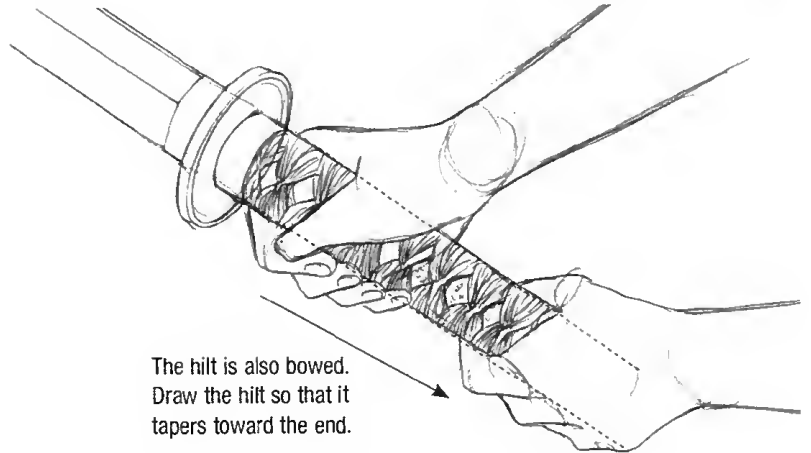


The guard covers the right hand, obscuring almost all of it from view.

Profile

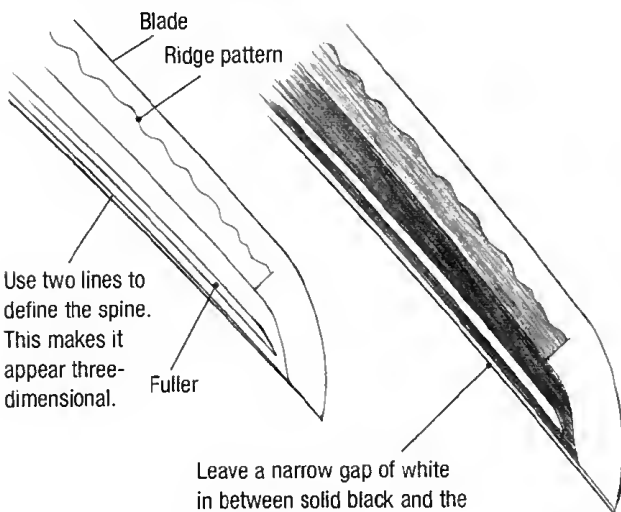


Use the hilt length as a basis for determining the sword's full length.



The hilt is also bowed. Draw the hilt so that it tapers toward the end.

## Portraying the Point



Use two lines to define the spine. This makes it appear three-dimensional.

Fuller

Leave a narrow gap of white in between solid black and the exterior contour.

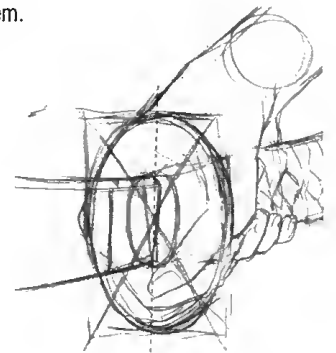
## Hilt Sketching Steps



① Sketch layouts of the hilt and guard as you envisioned them.



② Sketch a layout of the guard.



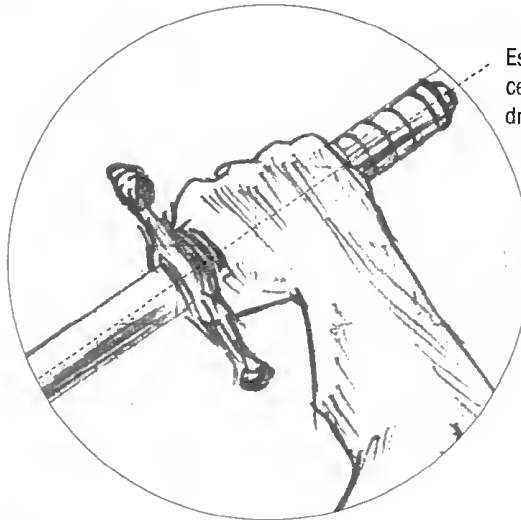
③ Draw the guard as you locate the ellipse's center.

# How to Draw a Hand Gripping

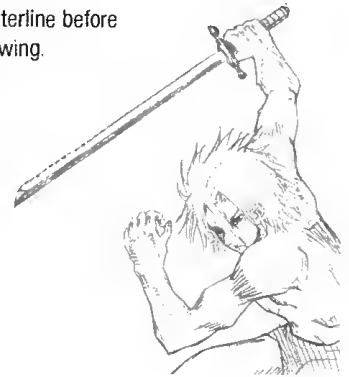
Draw a hand gripping a sword or a shinai forming a fist.

## Holding a Sword in One Hand

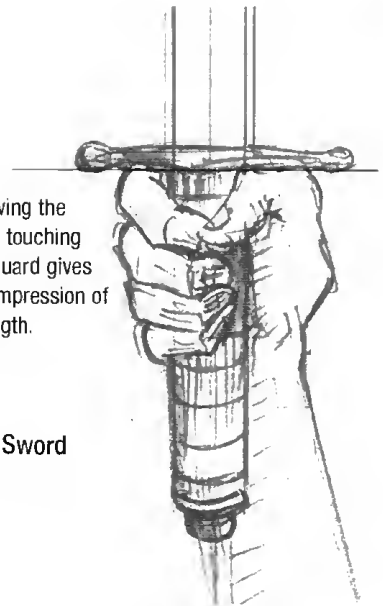
Brandishing a Sword



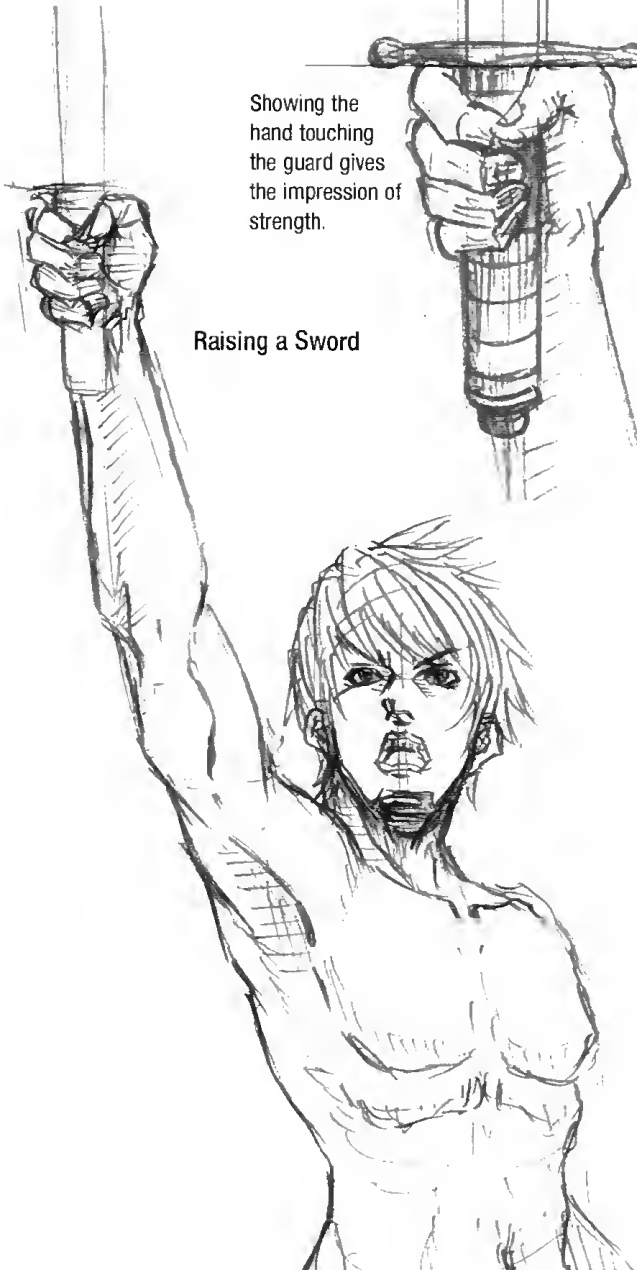
Establish the centerline before drawing.



Showing the hand touching the guard gives the impression of strength.



Raising a Sword

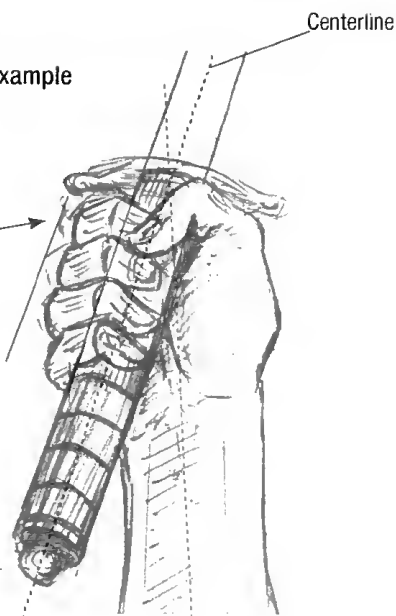


Incorrect Example

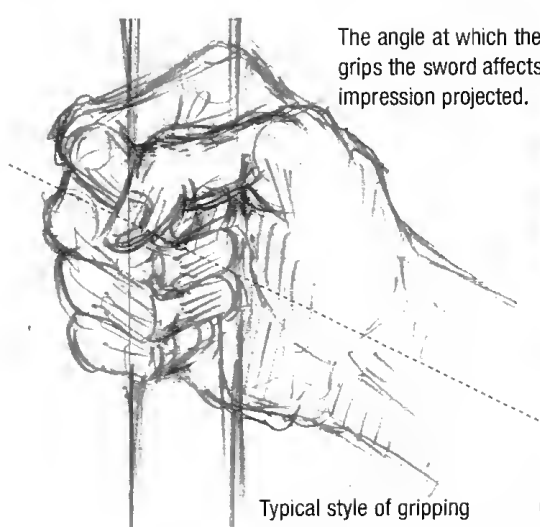
**Incorrect**

The hilt's girth is inconsistent.

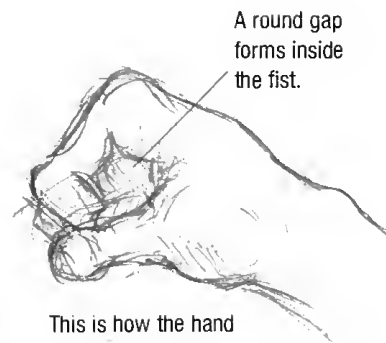
Draw the fingers wrapping around the hilt. The fingers' joints should lie parallel to the hilt's contours.



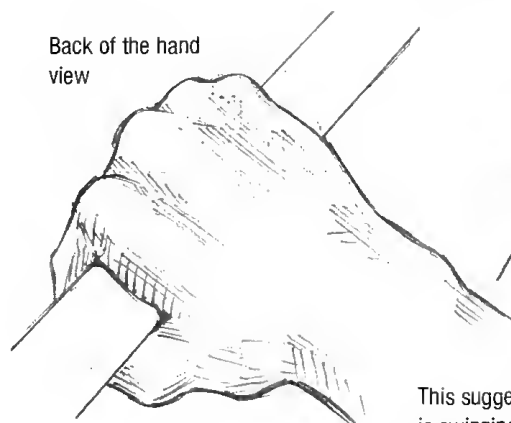
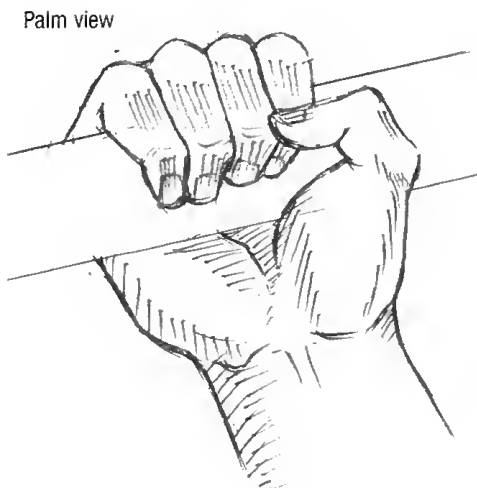
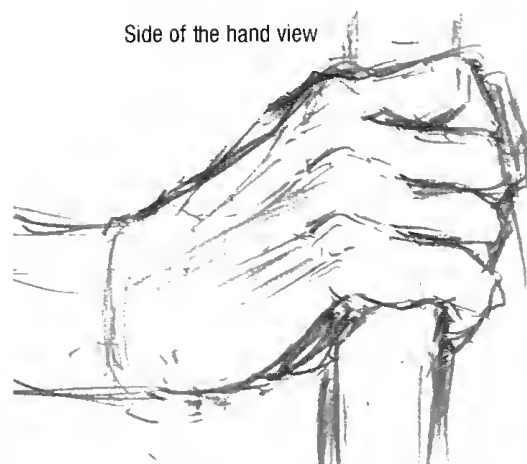
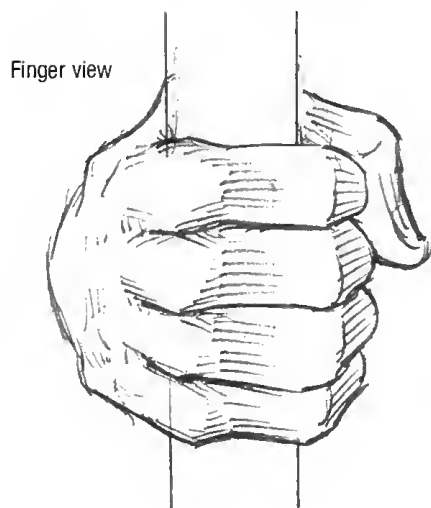
# Common Styles of Gripping a Sword



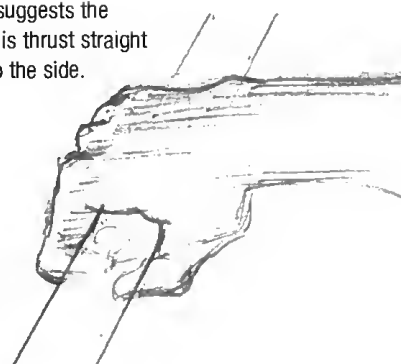
Typical style of gripping a sword.



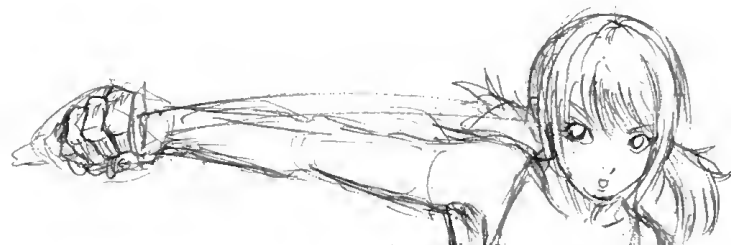
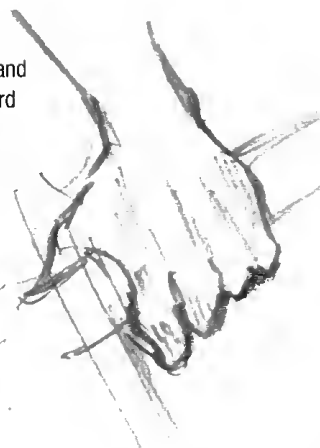
This is how the hand appears when holding a pole or other long object.



This suggests the hand is thrust straight out to the side.



This suggests the hand is swinging the sword downward.



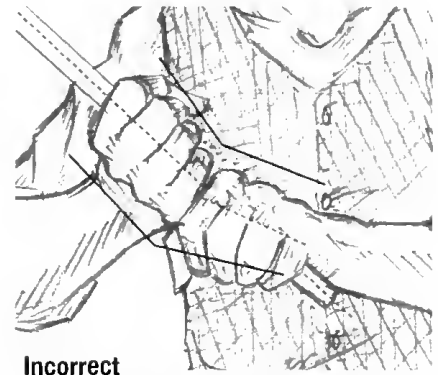
While the arm is primarily responsible for brandishing a sword, make sure that you draw the hand as a fist gripping it.

## Holding a Sword with Both Hands

**Note 1**  
Align the fingers as they grip the hilt.



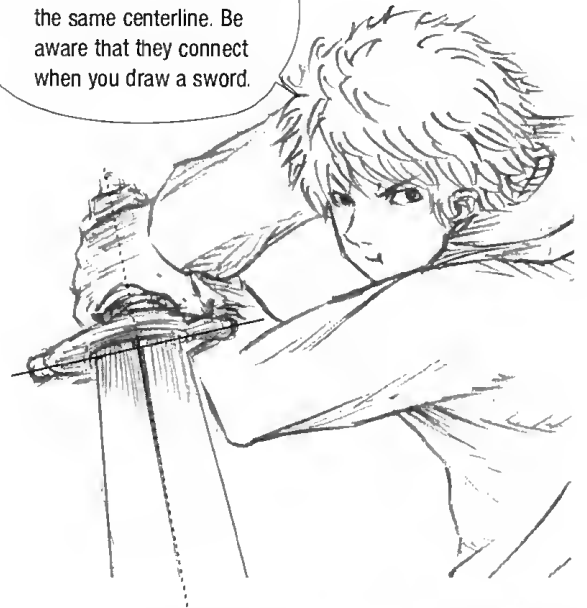
Ensure that this line lies parallel to the hilt when you draw the hands.



**Incorrect**

Incorrect Example: Inside the hands, the sword appears bent.

**Note 2**  
The blade and hilt share the same centerline. Be aware that they connect when you draw a sword.



**Note 3**  
If the sword's point ends in a rhombus, draw the hilt line parallel to the diagonal that divides the rhombus into two halves.



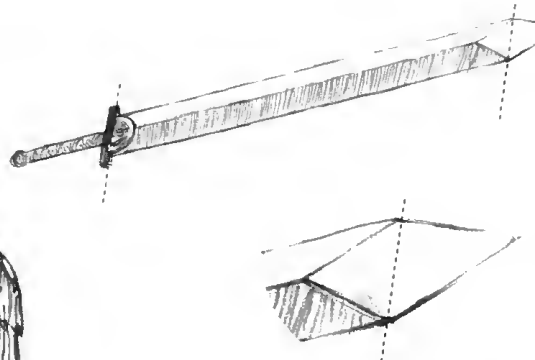
Incorrect Example:  
The centerlines of the hilt and the blade do not align.

**Incorrect**



This line, which extends directly from the hilt, is the correct centerline.

The blade's centerline does not match the hilt's.



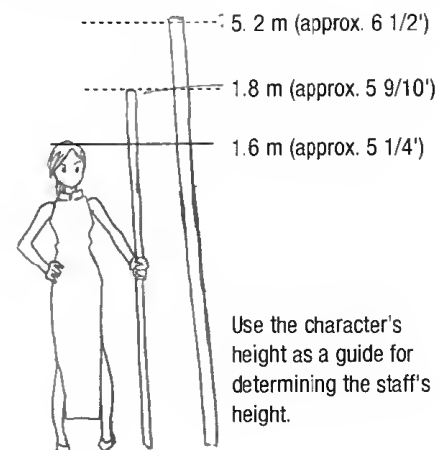
Rhombus's diagonal line

# Staffs and Spears

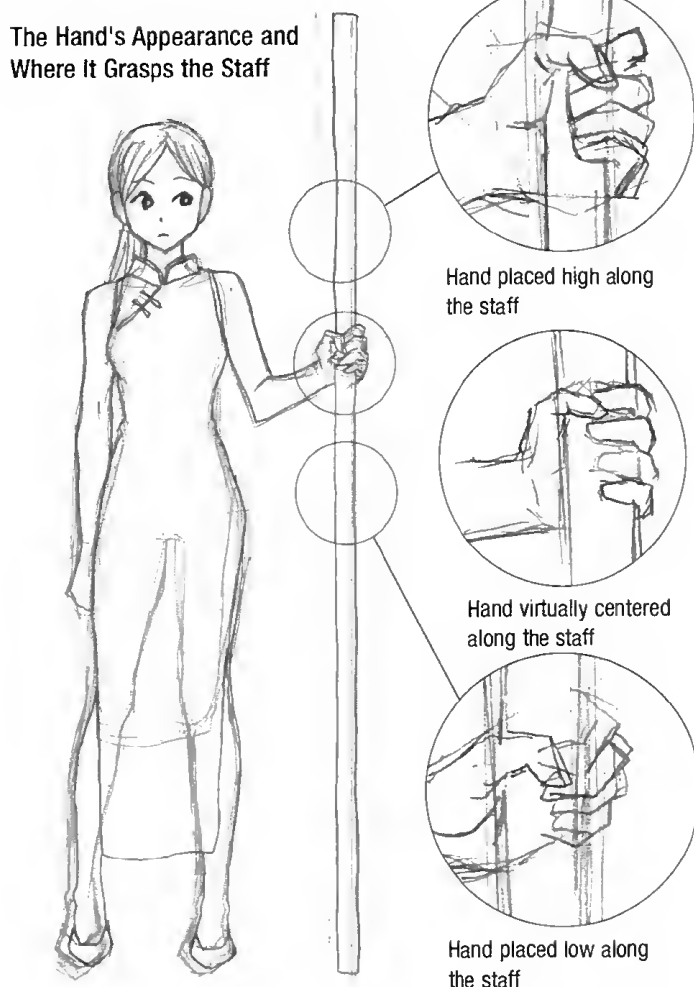
## Staffs

The staff is a long cylindrical pole. Attaching a blade to the end results in a spear.

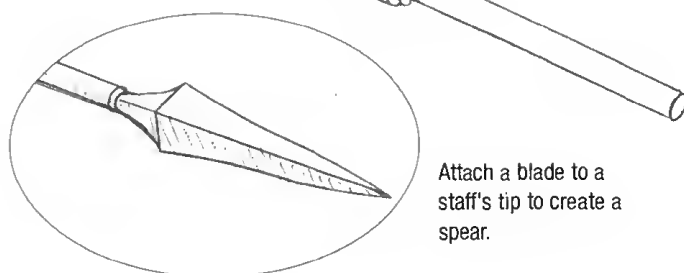
### Target Lengths



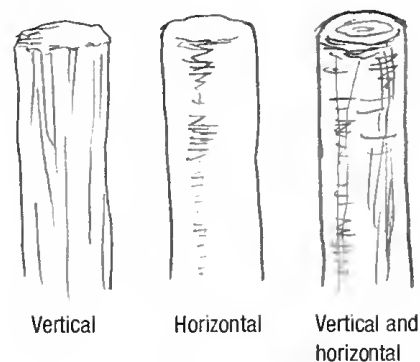
### The Hand's Appearance and Where It Grasps the Staff



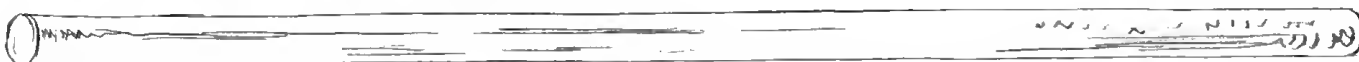
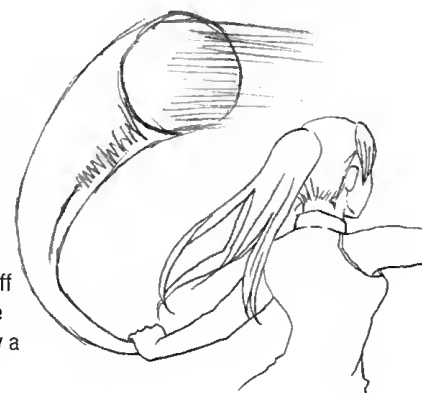
A line drawn to connect both hands should match the staff's centerline.



### Portraying wood grain



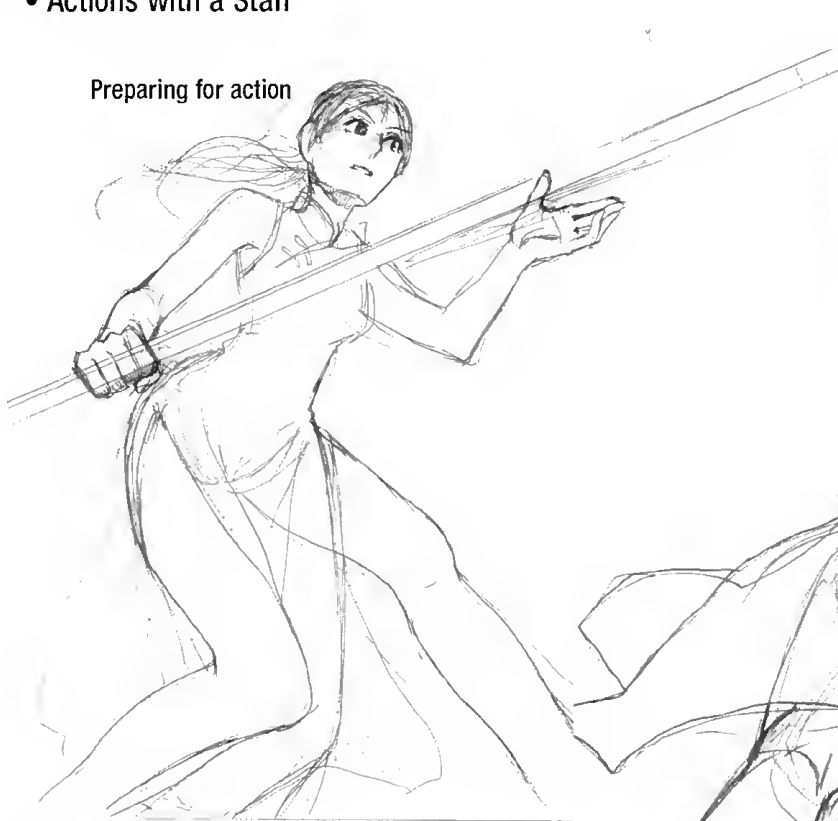
While staffs made of stiff materials, you may take artistic liberty and show a staff bending wildly.





## • Actions with a Staff

### Preparing for action



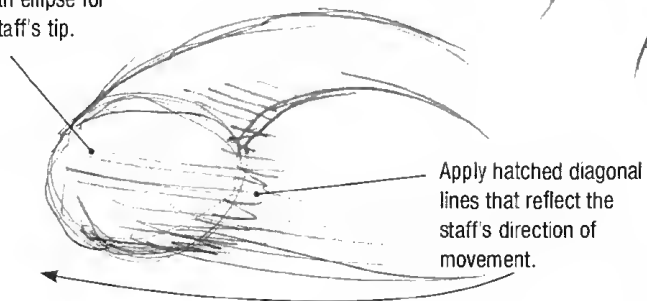
**Swinging a staff**  
(This shows the character after she has swung a staff. The sketch portrays motion.)



### Swinging a staff

Use an ellipse for the staff's tip.

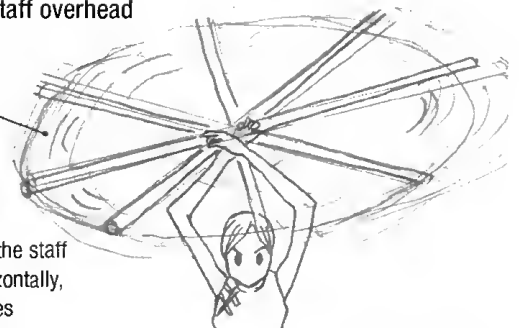
Show the staff bending dramatically.



Apply hatched diagonal lines that reflect the staff's direction of movement.

### Spinning a staff overhead

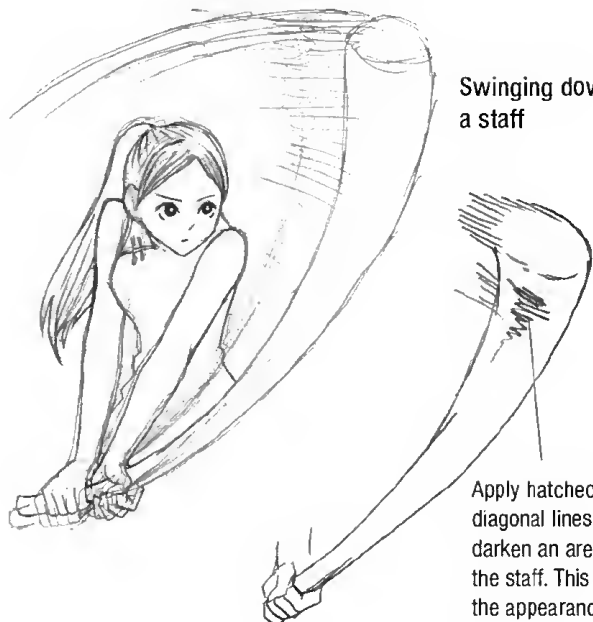
Draw an ellipse to describe the staff's trajectory.



Drawing echoes of the staff lying vertically, horizontally, and at oblique angles creates afterimages.

The spinning action takes place primarily at the hands, so do not leave much distance between them.

### Swinging down a staff



Apply hatched diagonal lines to darken an area of the staff. This gives the appearance of heaviness.



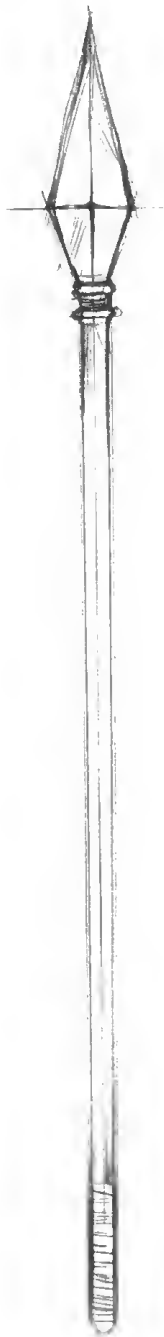
Draw the figure with both arms raised and crossing at the wrists.



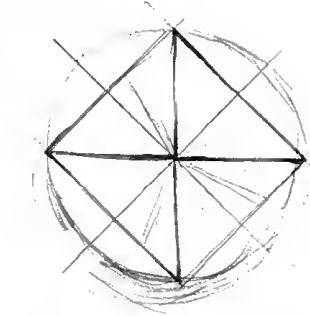


# Spears

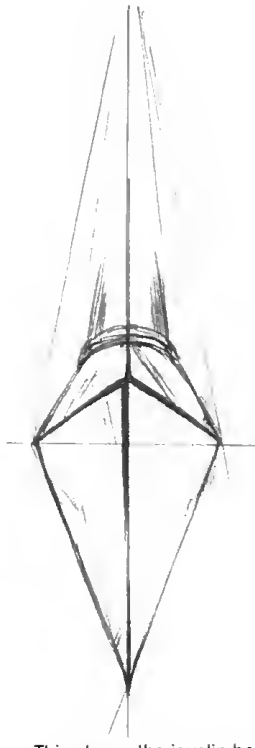
## Javelin



The head has four sides.



Looking straight on at the head reveals that the head forms a square.



This shows the javelin head in perspective. You might use a perspective drawing to show a javelin thrusting or hurling through the air.

## Lance



Head

Lances primarily belonged to European knights, who were horse-mounted soldiers.

## Common Spearheads



Stone



Bamboo



Triangular  
(This is a flat  
spearhead.)

## Scale



3 m  
(approx.  
9 7/8')

2 m  
(approx.  
6 1/2')

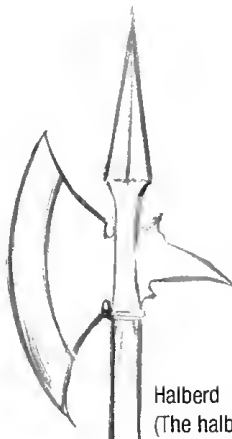
1 m  
(approx.  
3 1/3')



This *manga*-style spear features a trident head.



Trident prongs



Halberd  
(The halberd  
is a pole with  
an axe head.)

## Main Attack Styles



Thrusting



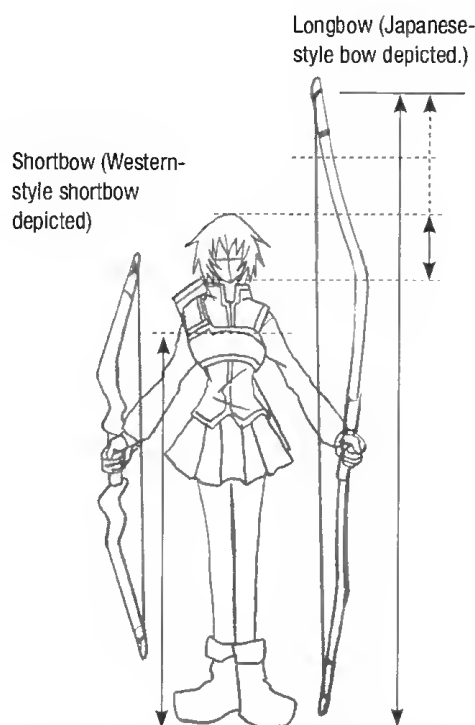
Cutting  
(The halberd is swung  
downward or the like.)

# Bows, Arrows, and Weapons with Chains

Make sure that you understand how these weapons are structured when you draw them.

## Bows and Arrows

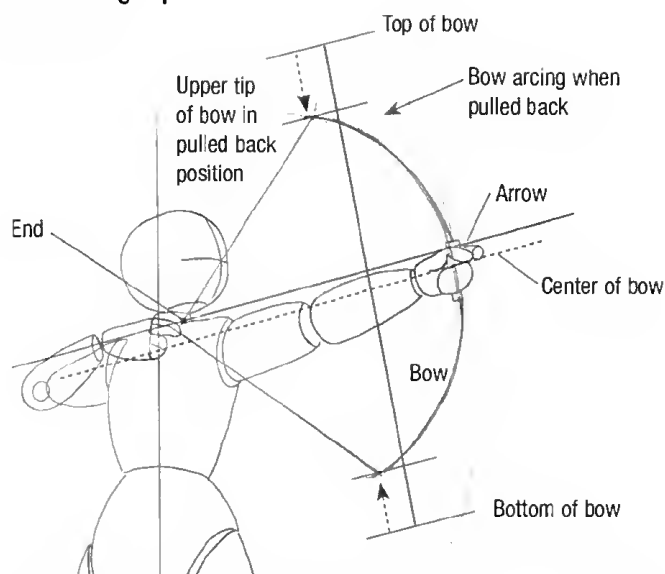
Bows comprise a flexible stick with a taut string. Arrows are sticks. Establish the correct proportions before you draw.



Shortbows come to about the chest in length.

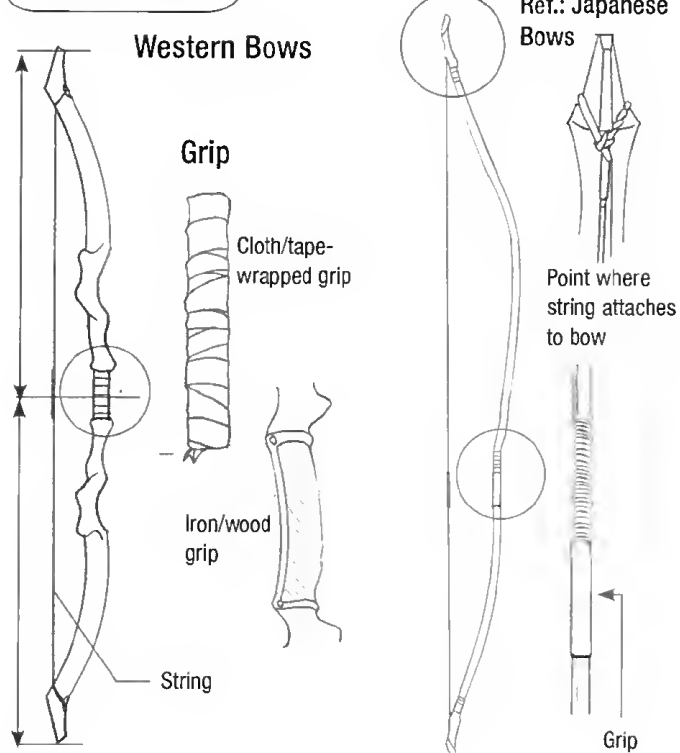
Western longbows are about as tall as a person. Japanese bows are approximately two additional head-lengths above the height of one person.

## Sketching Tips



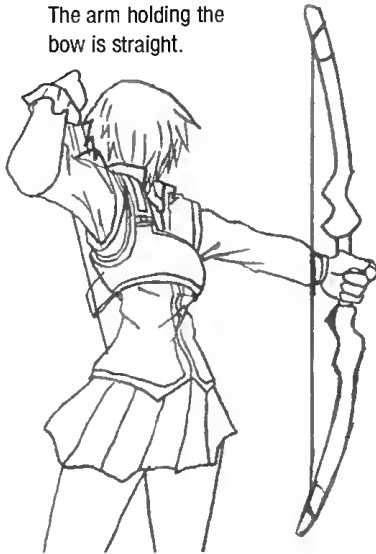
- 1 Draw the extended arm. Where the hand grips the bow becomes the bow's center.
- 2 Sketch the layouts of the bow and arrow so that they lie perpendicular to one another.
- 3 Make the upper tip and lower tip equidistant from the bow's center and produce a layout sketch of the bow in a pulled back position.
- 4 The bow describes a large arc when it is pulled back. Draw the arcing bow so that the upper and lower tips bend equally toward the center.

## Bow Structure



## Shooting an Arrow

The arm holding the bow is straight.



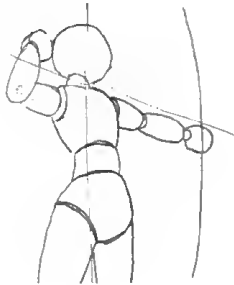
Correct



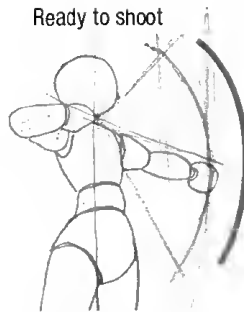
If you draw an archer ready to shoot from a front view, the archer's face will not be visible.



Threading an arrow



Ready to shoot



The bow now forms a crescent.

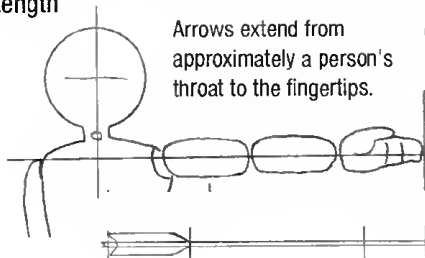
Incorrect



This bow is incorrect. Although the bow is pulled back, it is still straight.

## Arrow Structure

Length



Arrows extend from approximately a person's throat to the fingertips.

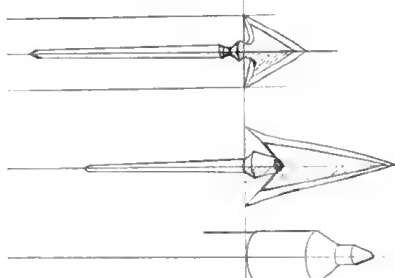
The arrow might be longer, depending on the distance it is meant to travel.



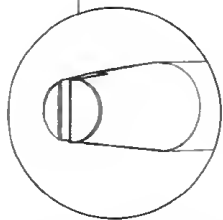
Quiver: The quiver holds the arrows at the archer's back.

Fletchings are approximately 15 cm or about 6" long.

Arrowheads

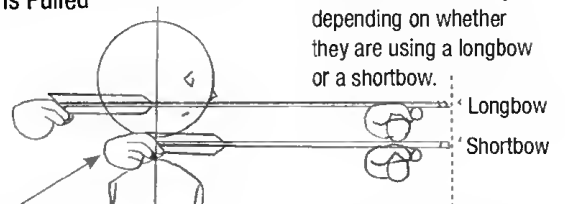


The arrow's end has a groove for the bowstring.



Differences in How Far Back an Arrow Is Pulled

Archers will pull arrows back differently, depending on whether they are using a longbow or a shortbow.



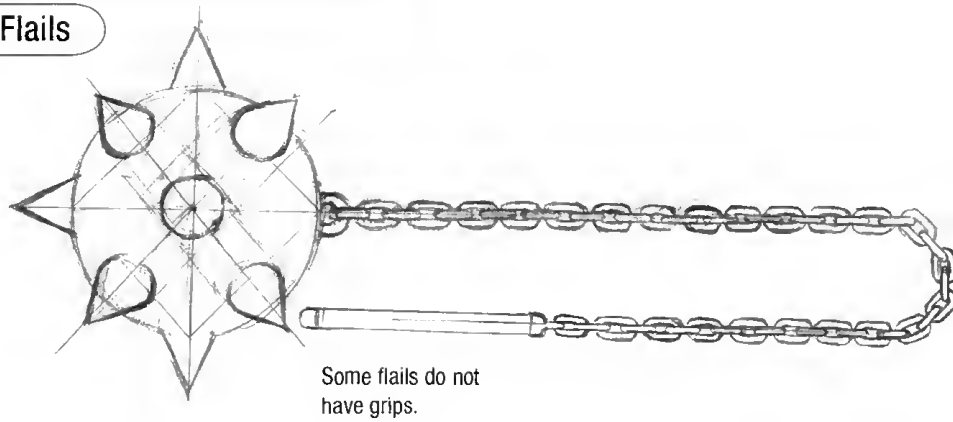
When using a shortbow, the archer will pull the bow back so it is level with the chin.

The arrows' points are held approximately at the same position.

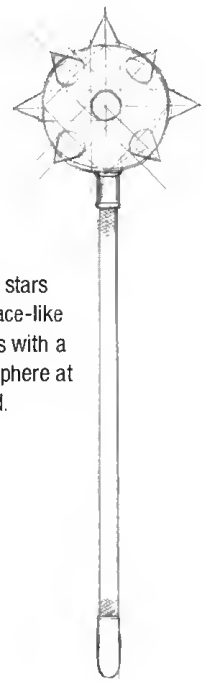
## Weapons with Chains

Flails are iron spheres covered in spikes and attached to a chain.

### Flails



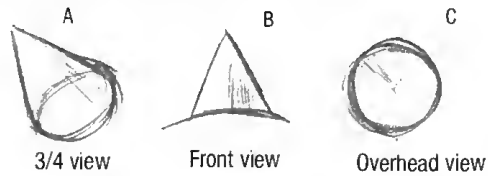
Some flails do not have grips.



Morning stars were mace-like weapons with a spiked sphere at the head.

### Points in Sketching the Flail Head

The three shapes below are essential to drawing the flail's spikes.

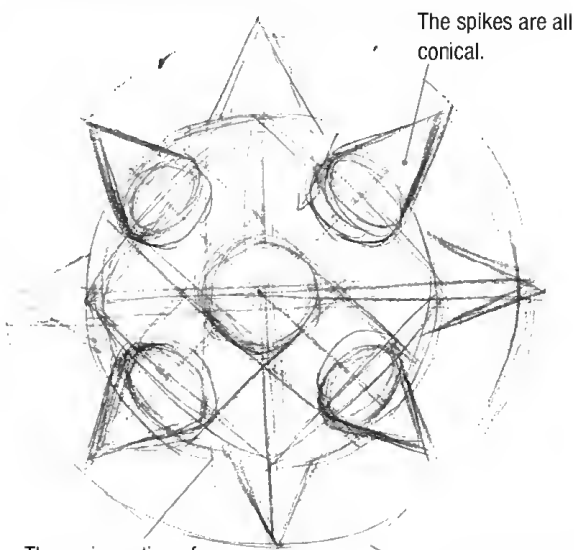


3/4 view

Front view

Overhead view

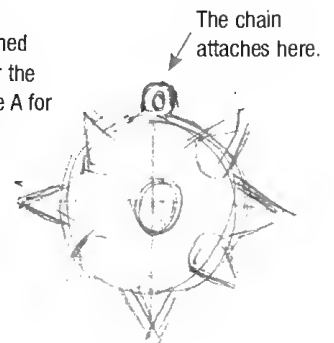
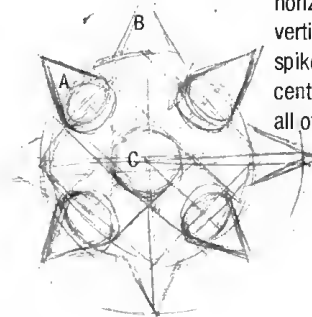
Use B to portray horizontally and vertically positioned spikes. Use C for the center spike. Use A for all other spikes.



The spikes are all conical.

The main portion of the head is a sphere.

This layout circle indicates how far the spikes' points extend.

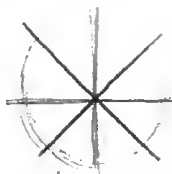


The chain attaches here.

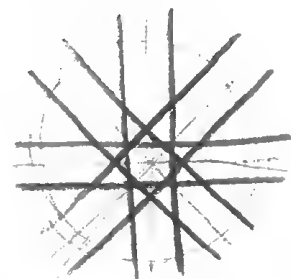
### Sketching Steps



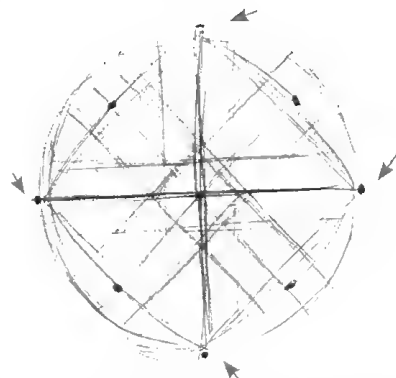
① Draw a circle and add its center point.



② Add vertical, horizontal, and diagonal lines. These form the centerlines of the flail's spikes.



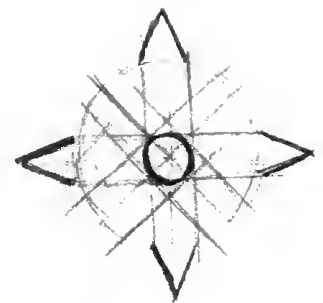
③ These lines mark the spikes' widths. Use the centerlines as bases for drawing bands that indicate the spikes' widths.



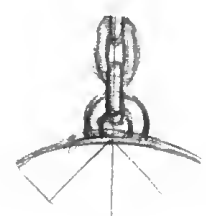
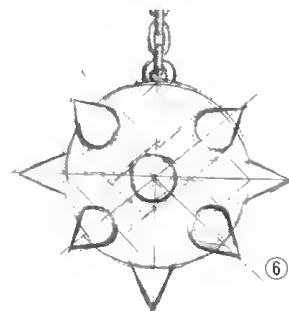
④ Connect where the vertical and horizontal lines intersect with the original circle. The resulting points mark each spike's position.



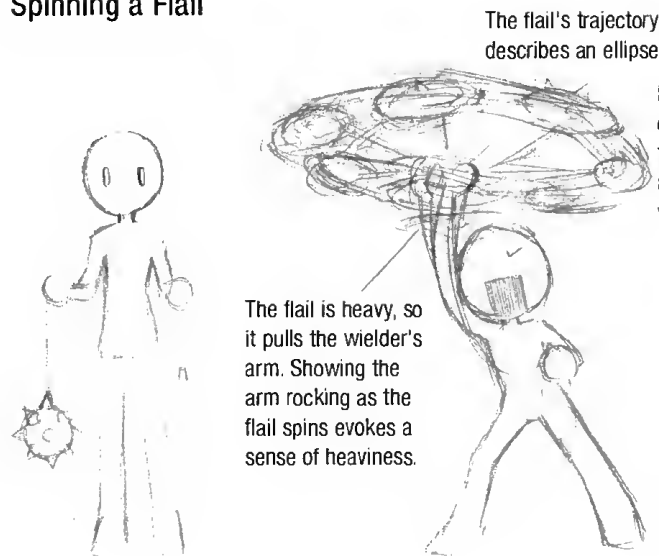
⑤ Draw the spikes.



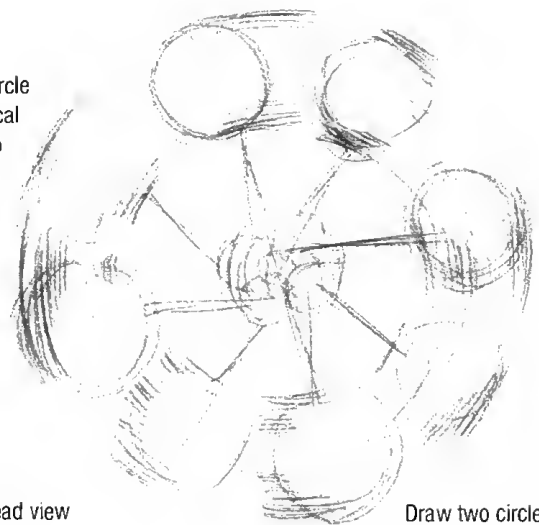
⑥ Attach a chain to finish.



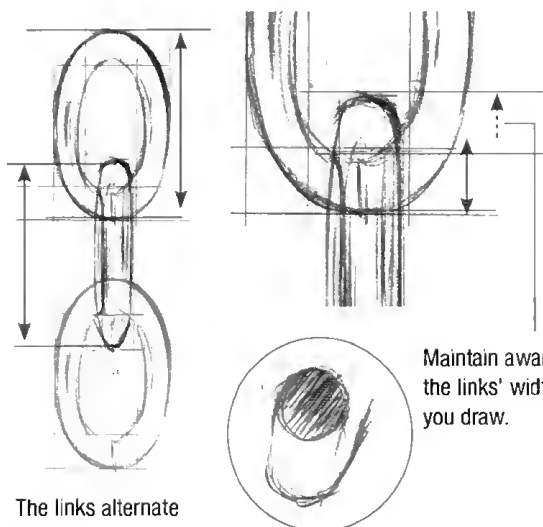
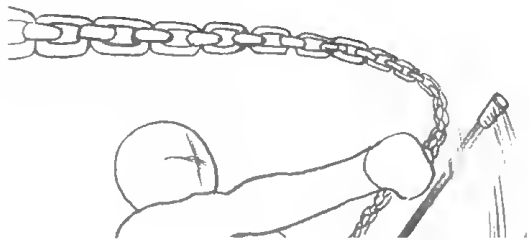
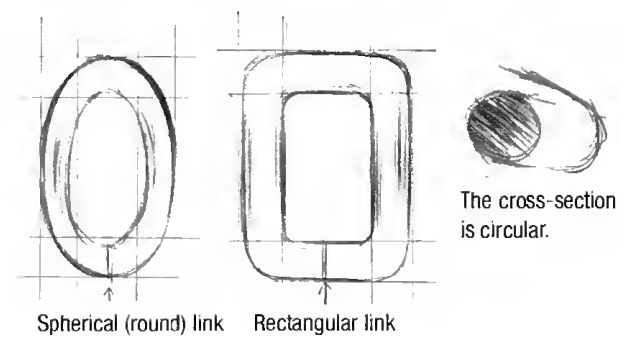
## Spinning a Flail



Overhead view



## Tricks to Drawing Chains



# Firearms

## Handguns

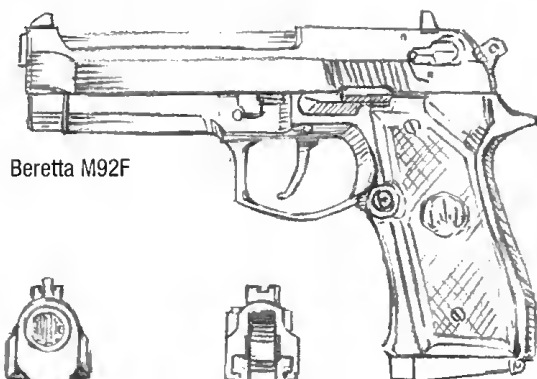
Use blocks and tubes as the base forms.

Use perspective to create compositions that pack a punch. Normally, you would draw a gun as a standard solid.

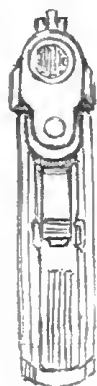


## Semi-Automatics and Revolvers

### Semi-Automatics



Beretta M92F



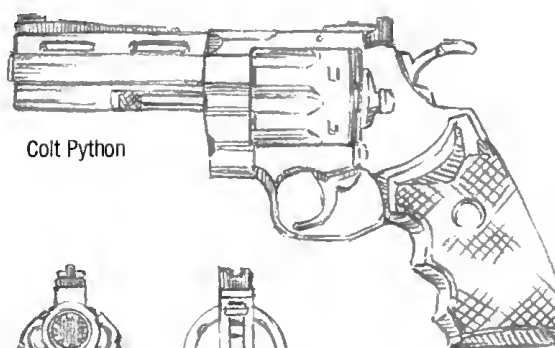
Front



Rear

The Beretta forms a rectangle from both angles.

### Revolvers



Colt Python



Front



Rear

The round cylinder stands out when viewed from either the front or rear.

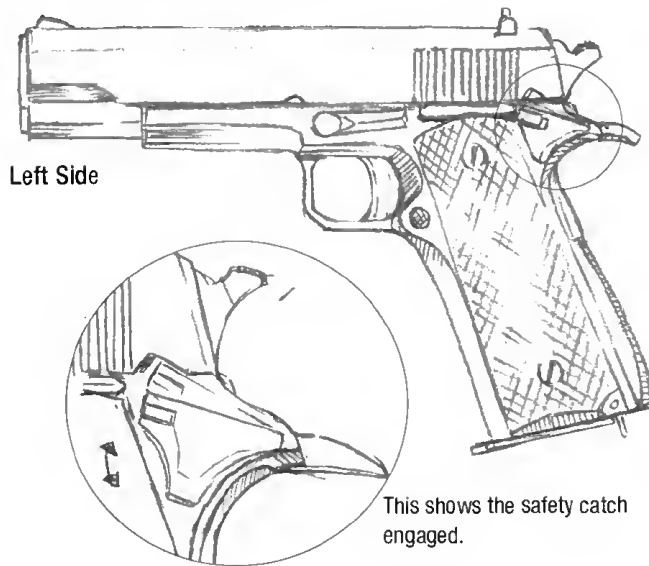
Handguns can be roughly divided into two categories  
1) semi-automatics and  
2) revolvers.



## Gun Basics

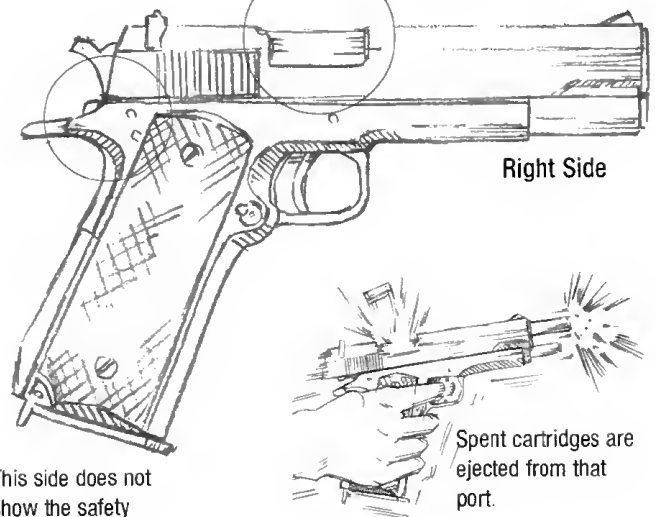
### • Guns Are Not Symmetrical

An open, rectangular hole is visible.



Left Side

This shows the safety catch engaged.



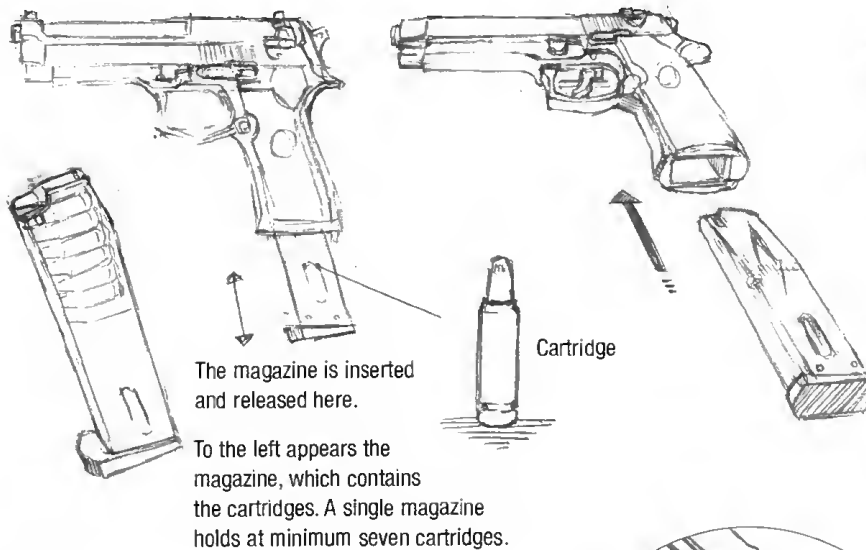
Right Side

This side does not show the safety catch.

Spent cartridges are ejected from that port.

### • Semi-Automatics and Revolvers Are Loaded Differently

#### Semi-Automatics



The magazine is inserted and released here.

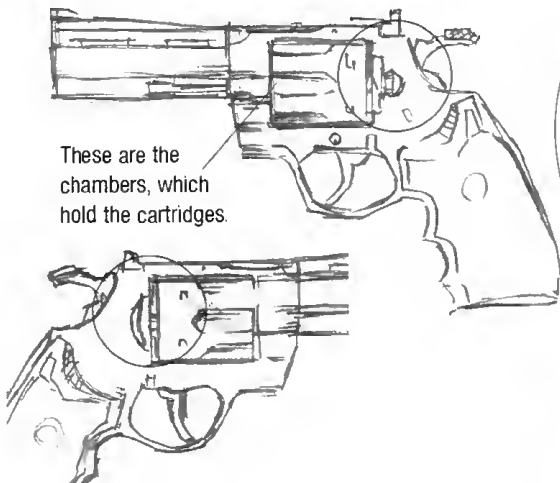
To the left appears the magazine, which contains the cartridges. A single magazine holds at minimum seven cartridges.

Cartridge

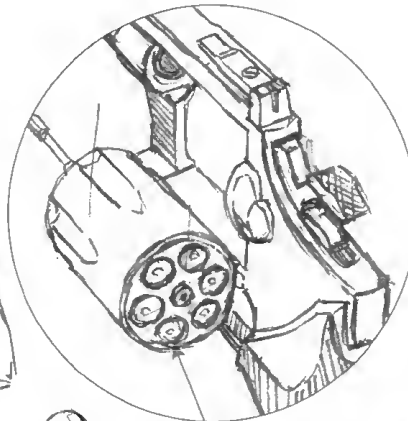
To the right is the pose adopted when loading a magazine.



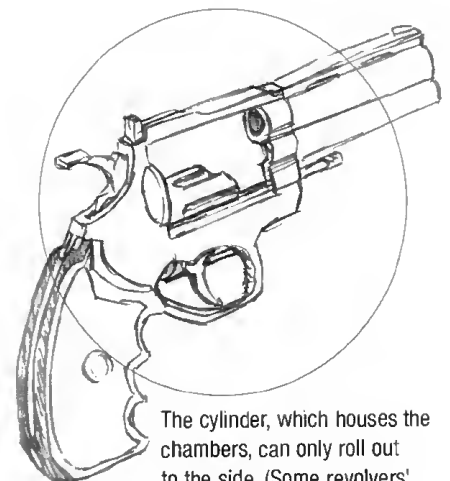
#### Revolvers



These are the chambers, which hold the cartridges.



A single cartridge fills each chamber. A revolver holds a maximum of six cartridges.

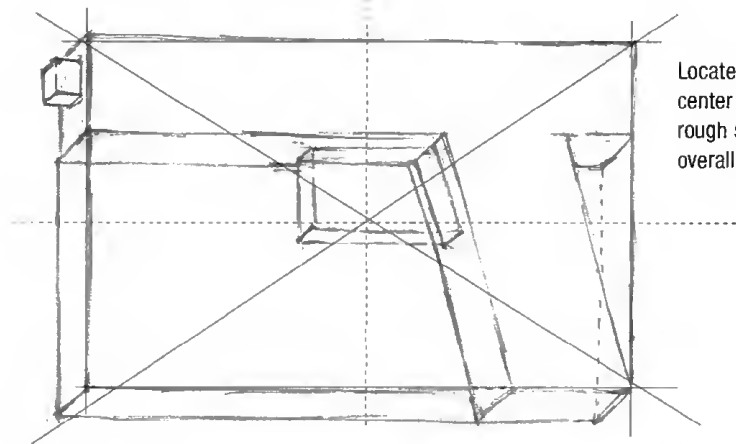
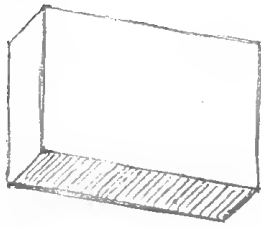


The cylinder, which houses the chambers, can only roll out to the side. (Some revolvers' chambers do not roll out of position.)

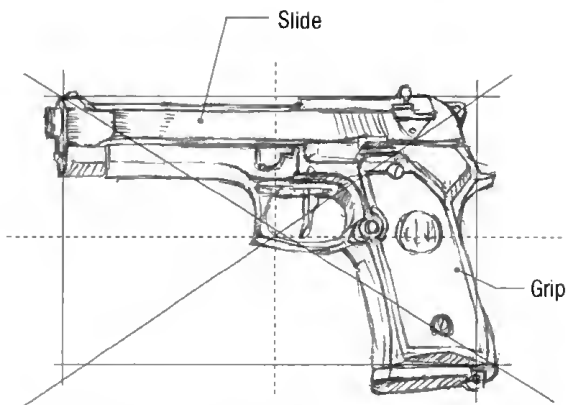
## Semi-Automatics

### Sketching Steps

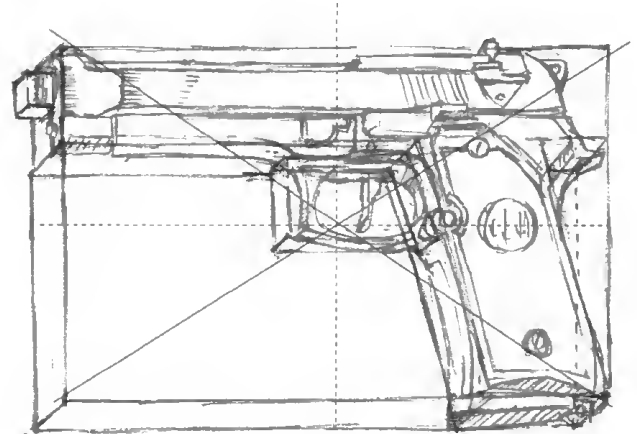
#### Low Angle



Locate the gun's center and produce a rough sketch of the overall form.

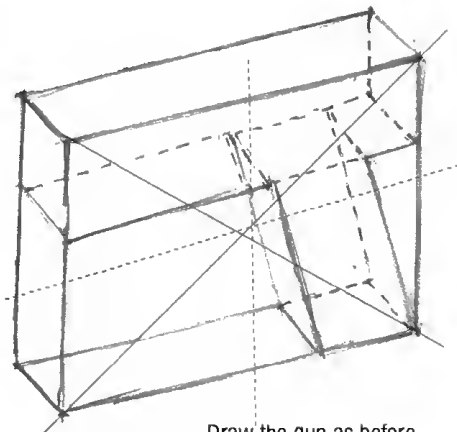
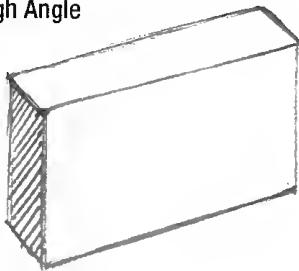


Whether composing from a high, low, or wide angle, use the "X-method" to locate the gun's center.

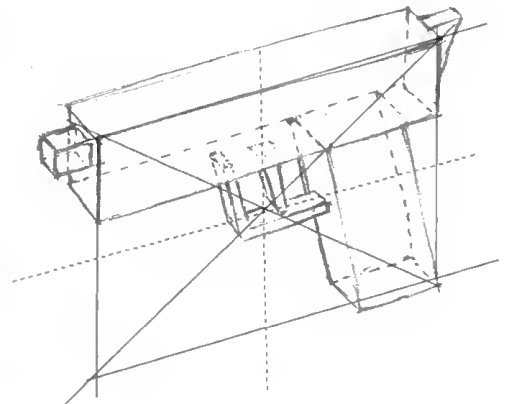


Clean up the forms as you draw.

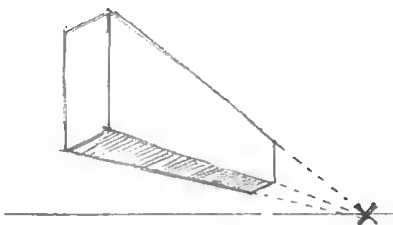
#### High Angle



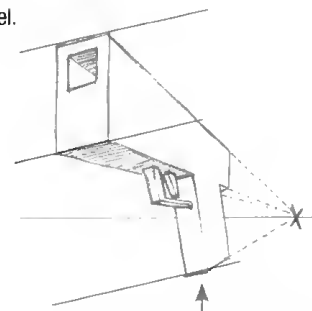
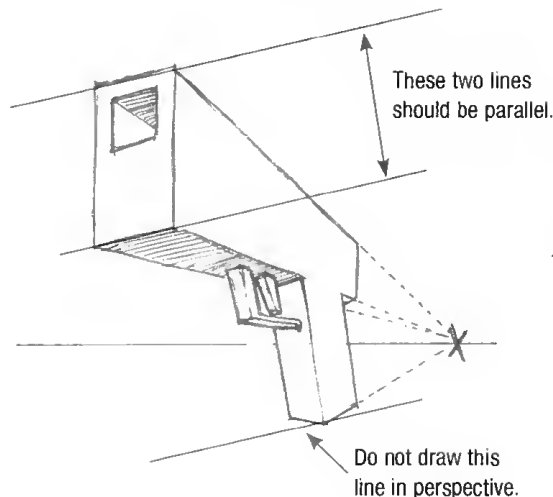
Draw the gun as before.



#### Wide Angle Drawn in Perspective



Draw the slide in one-point perspective.



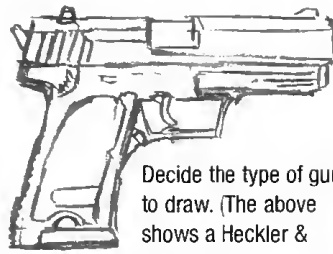
Drawing this line parallel to the others will cause the gun to appear misshapen. Select a line that produces the desired look.



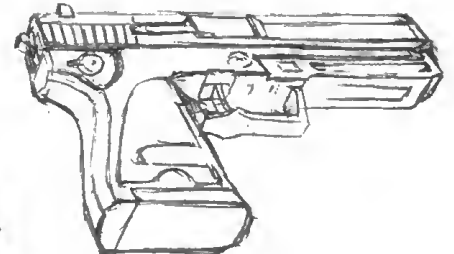
## Showing off a Character



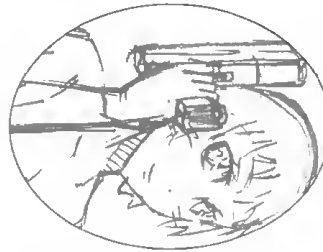
Heckler & Koch USP



Decide the type of gun to draw. (The above shows a Heckler & Koch USP.)



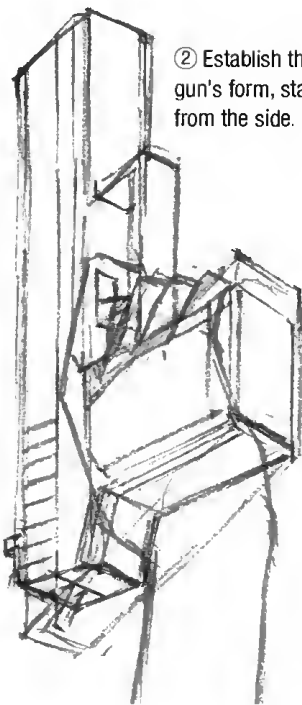
This shows the Heckler & Koch USP from a moderate low angle, 3/4 view.



The above is a rough sketch of the gun in profile.



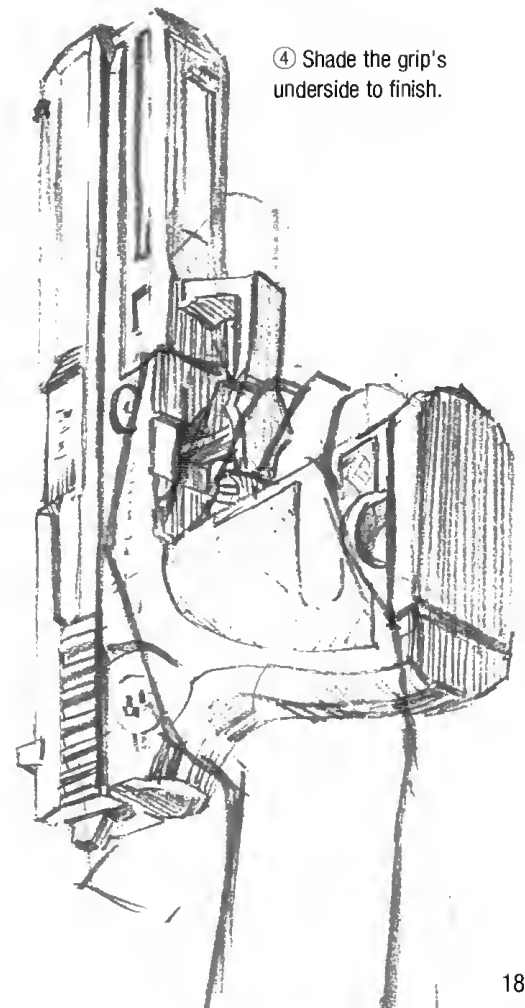
① Draw blocks to produce a layout sketch of the gun.



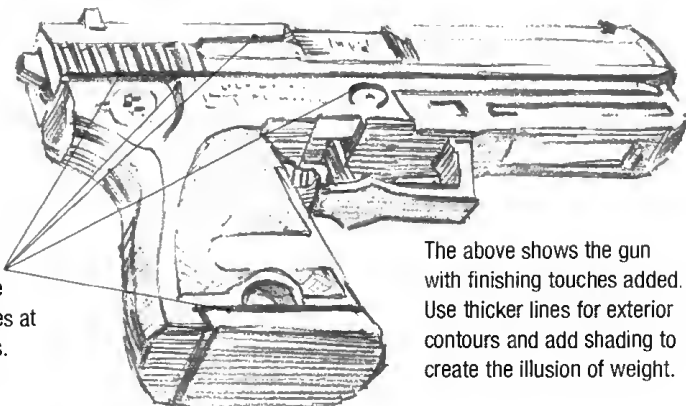
② Establish the gun's form, starting from the side.



③ While adding the details, clean up their forms.



④ Shade the grip's underside to finish.

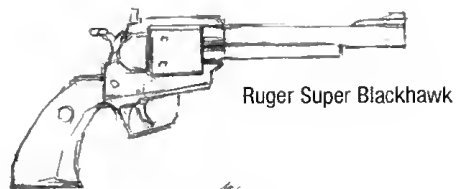


Thicken the contour lines at these areas.

The above shows the gun with finishing touches added. Use thicker lines for exterior contours and add shading to create the illusion of weight.

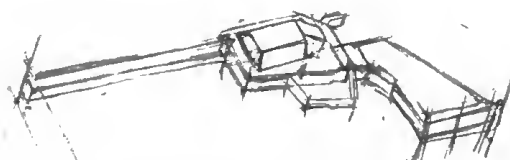
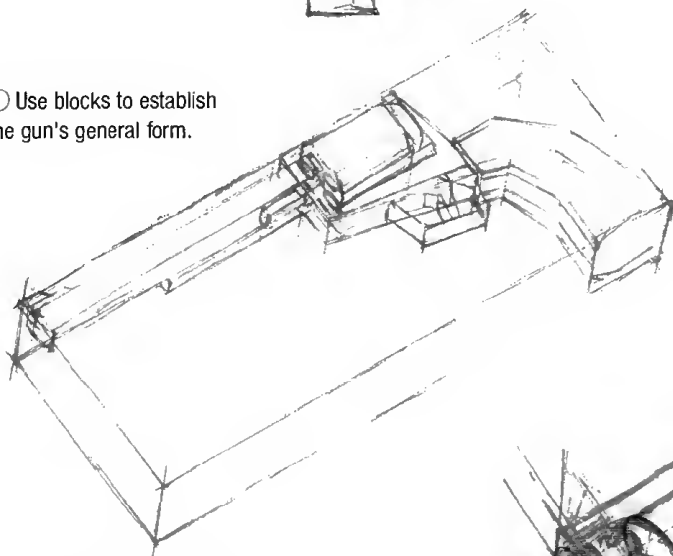
## Revolvers

### Sketching Steps



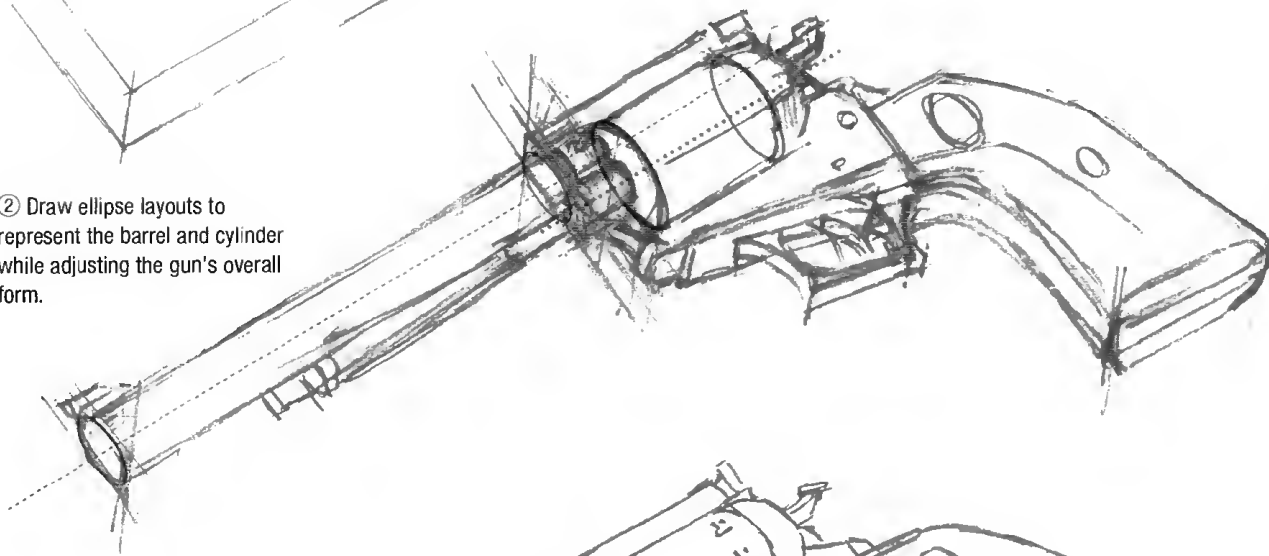
Ruger Super Blackhawk

- ① Use blocks to establish the gun's general form.

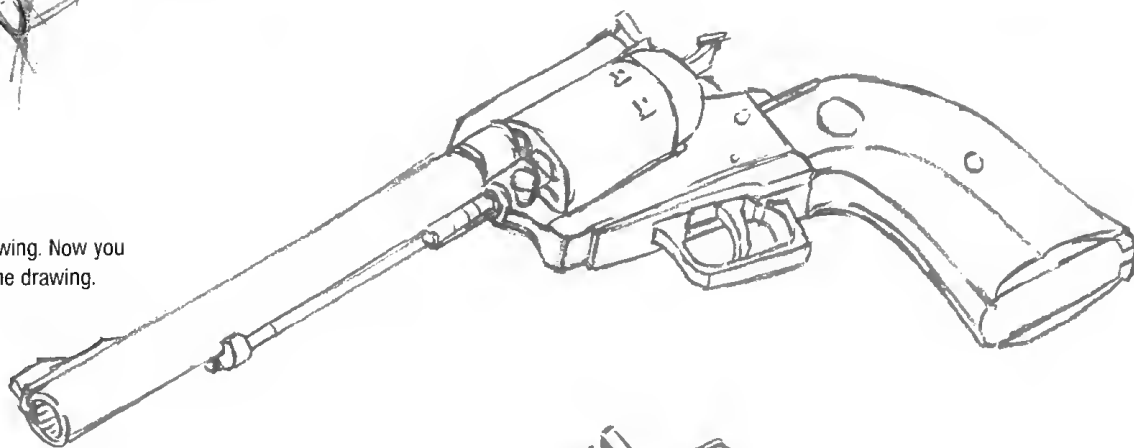


Study sketch: If you are drawing a certain make of gun for the first time, start by producing a sketch to study particularities in the gun's proportions and where it has volume.

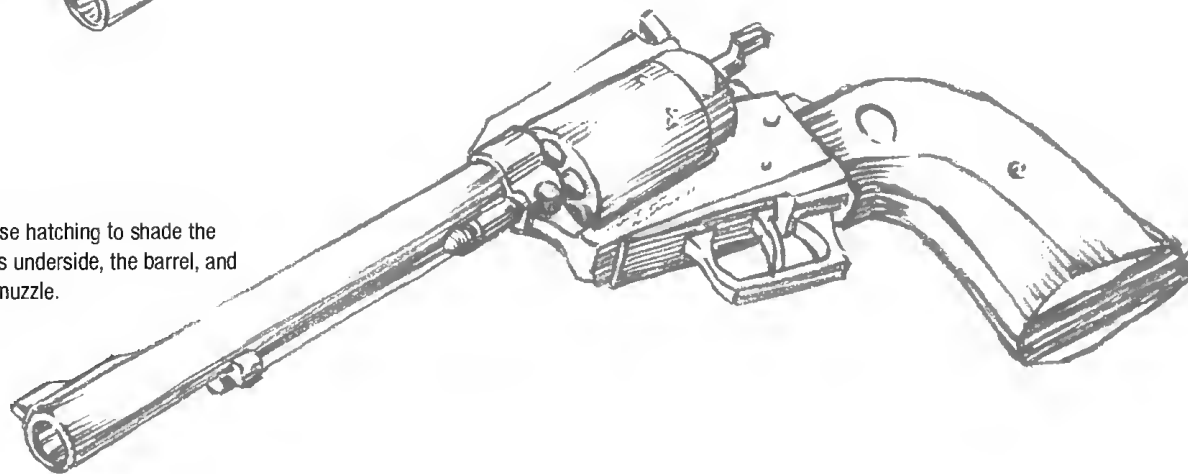
- ② Draw ellipse layouts to represent the barrel and cylinder while adjusting the gun's overall form.



- ③ Clean up the drawing. Now you have a completed line drawing.



- ④ Use hatching to shade the gun's underside, the barrel, and the muzzle.



## Showing off a Character

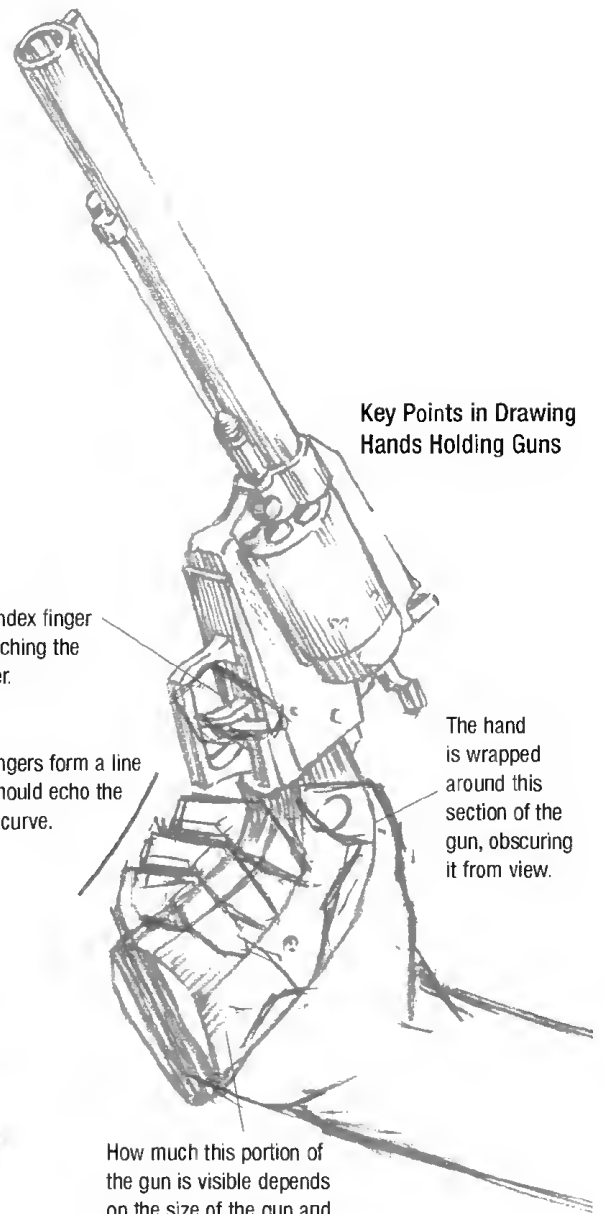


## Key Points in Drawing Hands Holding Guns

The index finger is touching the trigger.

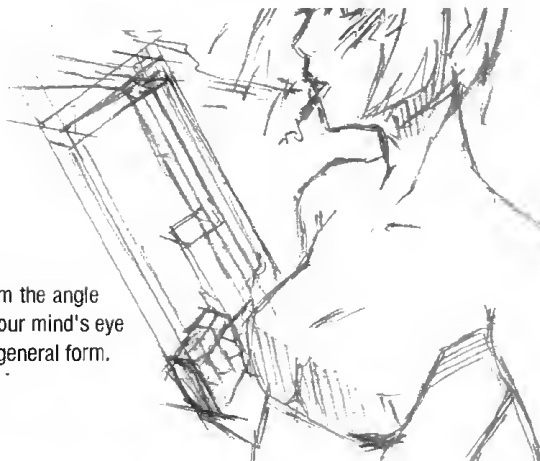
The fingers form a line that should echo the grip's curve.

The hand is wrapped around this section of the gun, obscuring it from view.



## Sketching Tips

Draw a block from the angle you pictured in your mind's eye and capture the general form.

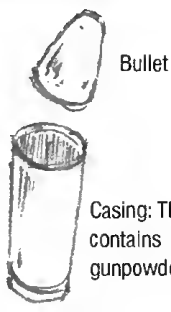


How much this portion of the gun is visible depends on the size of the gun and the hand.

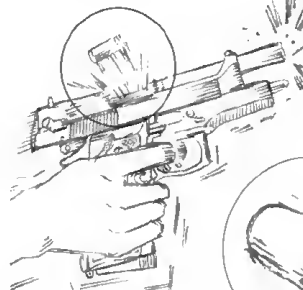
## Cartridge Structure



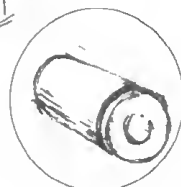
Bullets cannot fly in this form.



The cartridge comprises both the bullet and casing.



The bullet is sent hurtling.

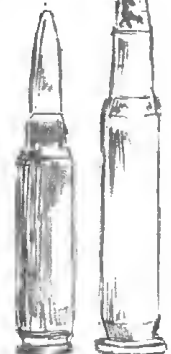


Spent cartridge (Casing)



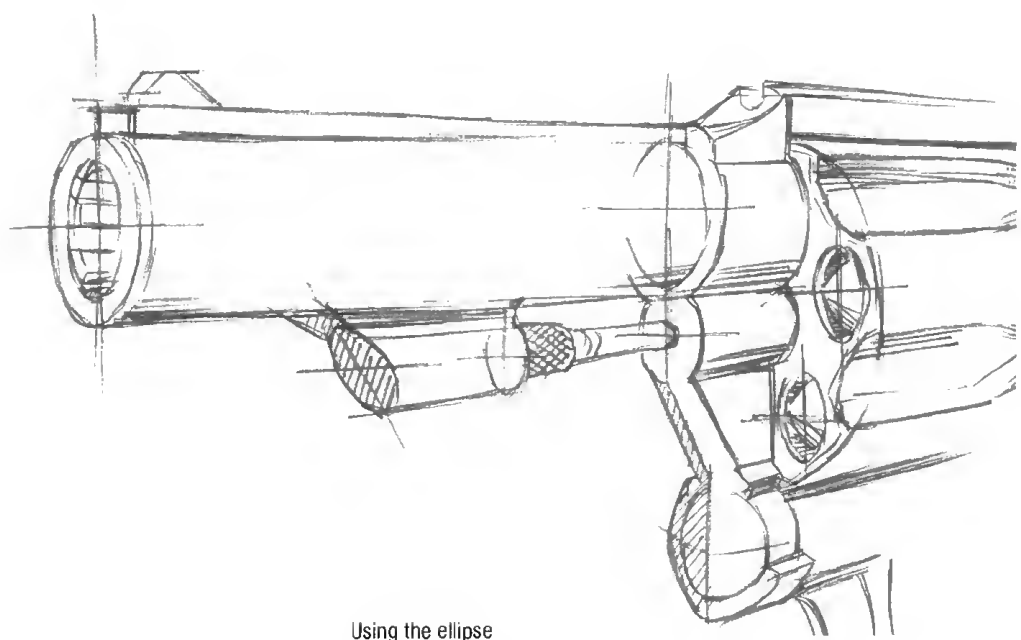
9 mm Parabellum

The appearance of the bullet and casing depends on the cartridge.

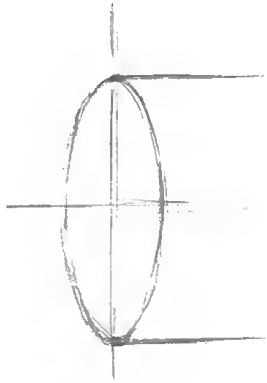


Cartridges used with fully automatic rifles (a.k.a. "machine guns") and the like.

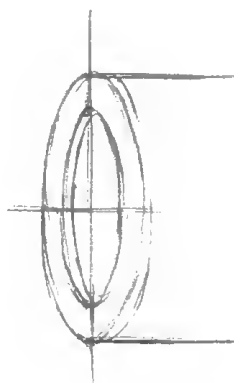
## Muzzles



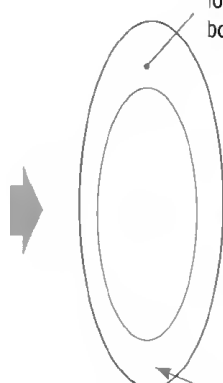
### Sketching Tips



Draw a cylinder.

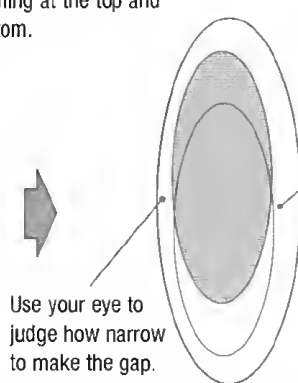


Add a hole inside the cylinder to represent the gun's muzzle.



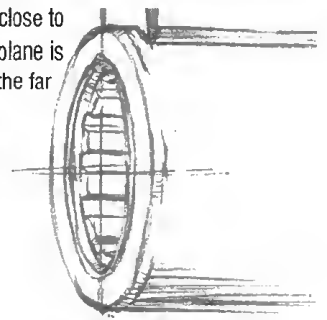
If you use an ellipse template, simply drawing a second ellipse that is slightly smaller than the first will not yield a satisfying gun muzzle.

Using the ellipse template results in unusually large gaps forming at the top and bottom.



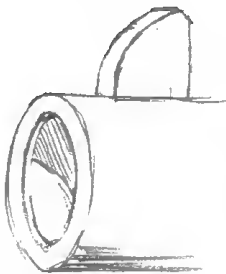
Use your eye to judge how narrow to make the gap.

Draw the ellipses so that the side of the muzzle close to the picture plane is wider than the far side.

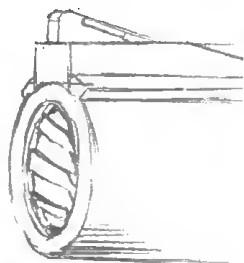


Final image

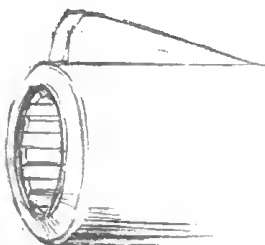
### Common Muzzles



Smoothbore muzzle

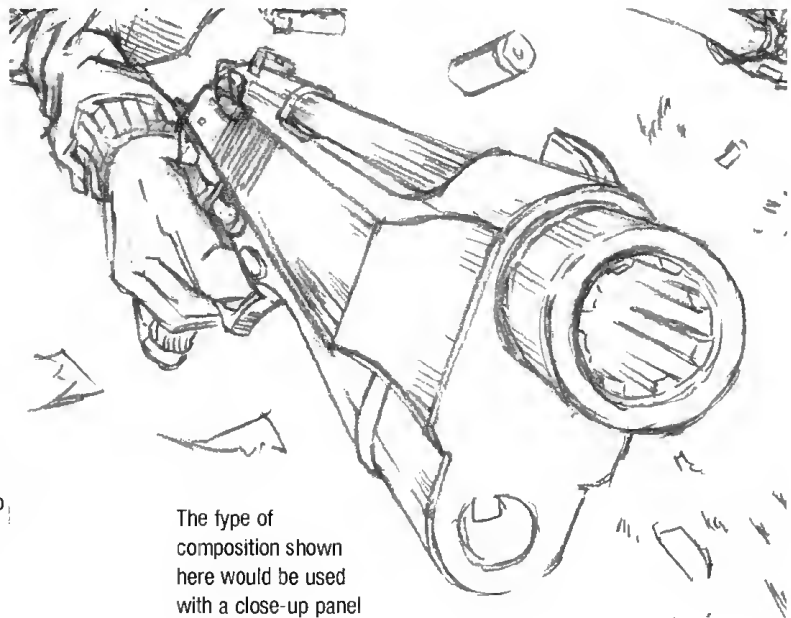


Muzzle with spiral rifling



Muzzle with straight rifling

The grooves visible just inside the muzzle are called "rifling." Rifling is present to put a spin on the bullet as it travels through the barrel.



The type of composition shown here would be used with a close-up panel or the like.

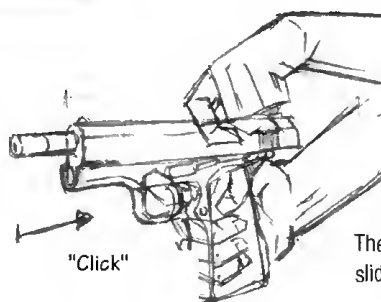
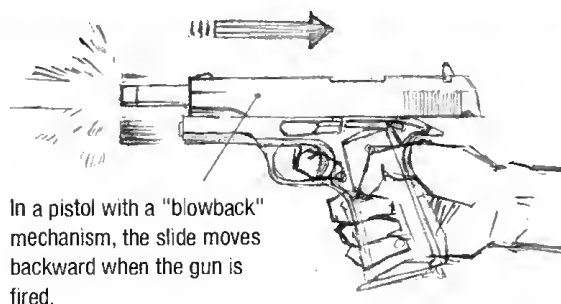


The above shows a wide-angle lens effect. Use wide-angle lens compositions to exaggerate the impression of an object thrusting toward the viewer.

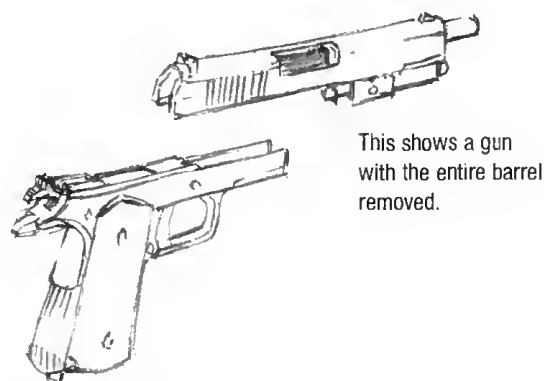
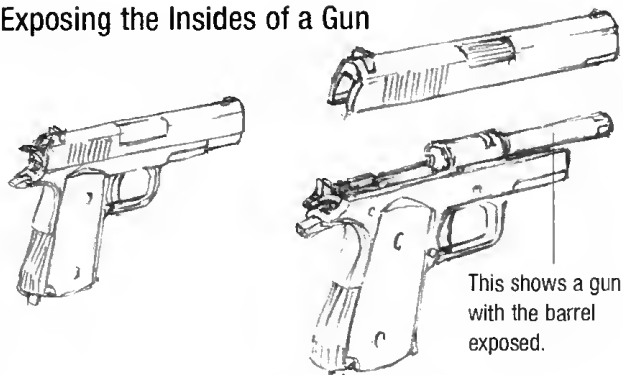


This shows a full-figure drawn as if it were a photo taken with a standard lens. The gun does not stand out visually. The gun's muzzle is a mere dot.

## What Is Blowback? And Basic Automatic Design



## Exposing the Insides of a Gun



## Showing off a Gun

(Compositions with Impact)



Sample gun:  
Colt Government

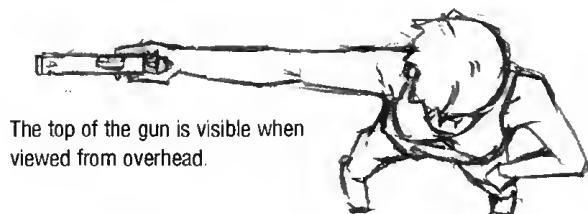
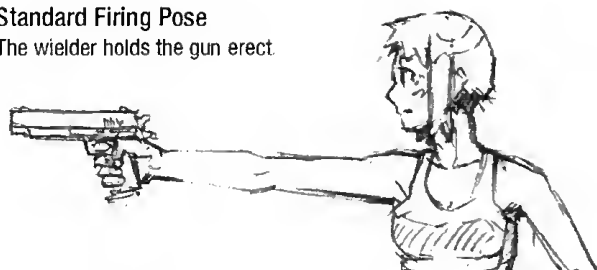


Pose layout sketch

## Firing Poses

### Standard Firing Pose

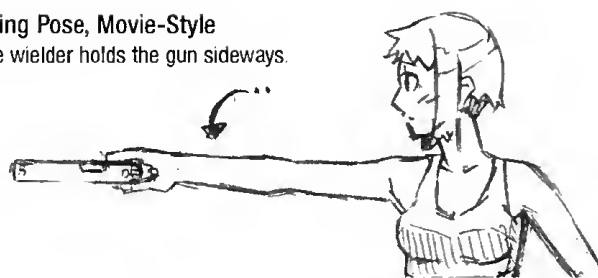
The wielder holds the gun erect.



The top of the gun is visible when viewed from overhead.

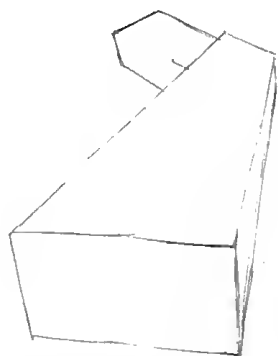
### Firing Pose, Movie-Style

The wielder holds the gun sideways.

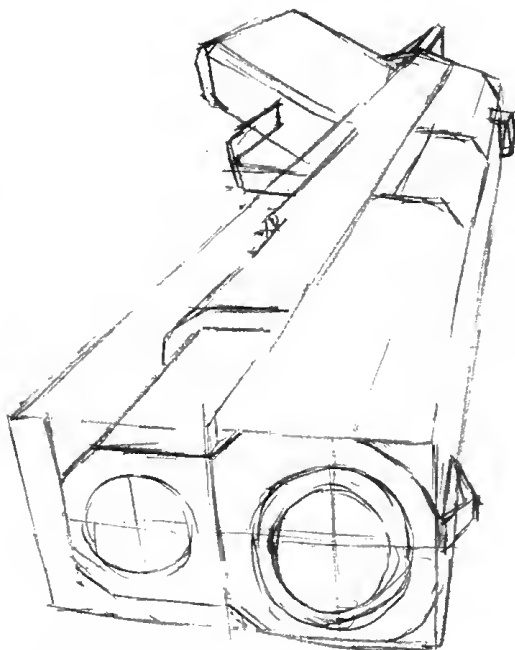


Overhead view

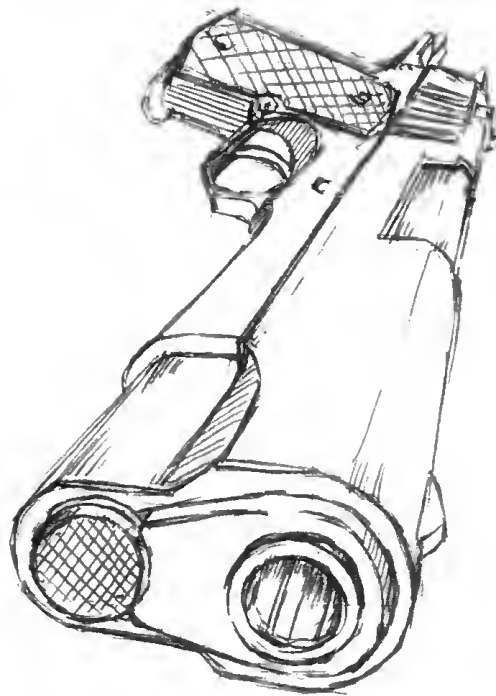
## Sketching Tips



① Sketch the gun's general form according to the pose layout.

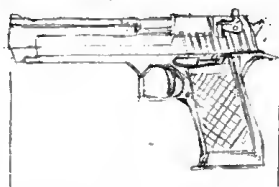


② Capture the gun's form.



③ Give the gun volume and add the details.

## Character and Gun Proportioning



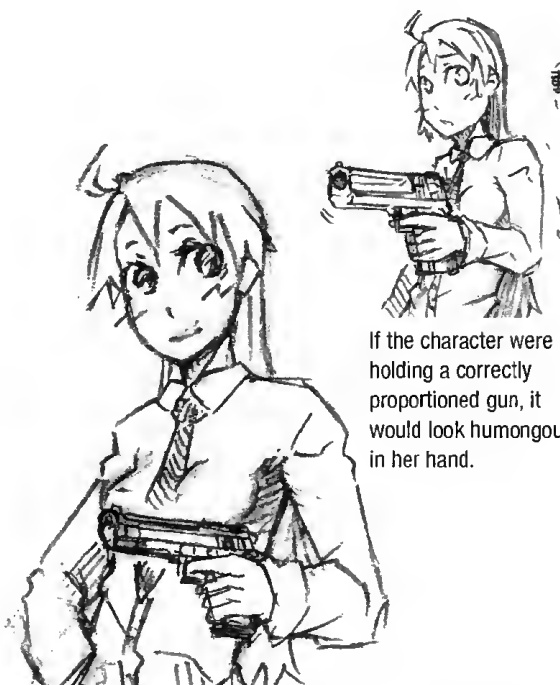
In *manga*, artists match the gun size to the character.



Character with a small hand



Big, hulking character



If the character were holding a correctly proportioned gun, it would look humongous in her hand.

The same gun's size can look quite different, depending on the character holding it.



This character is so immense, he makes the same gun look like a pea shooter.

Here, the gun is enlarged to match the character.



# Shotgun

Imagine you are drawing a broom when you draw shotguns.

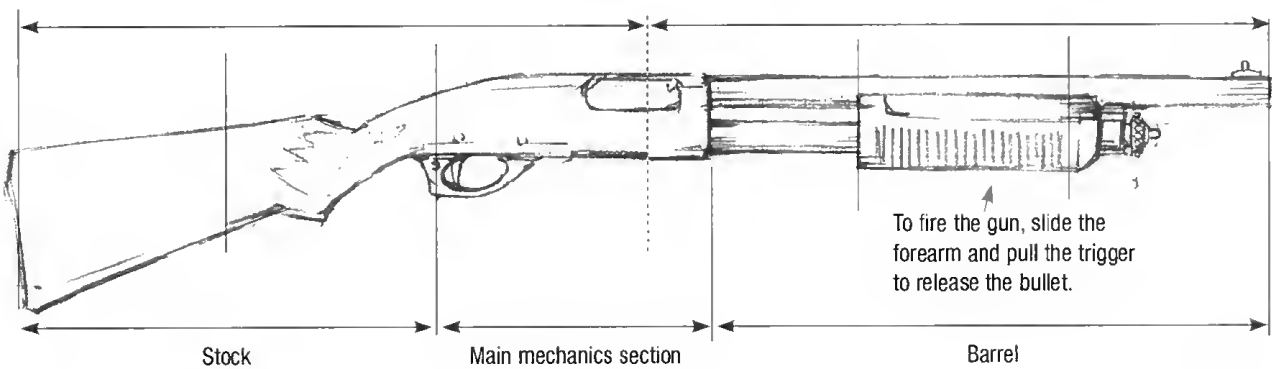


High angle

Profile (of the shotgun)

High angle

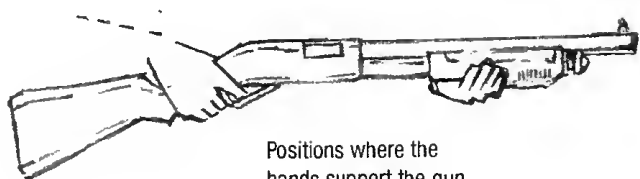
Profile



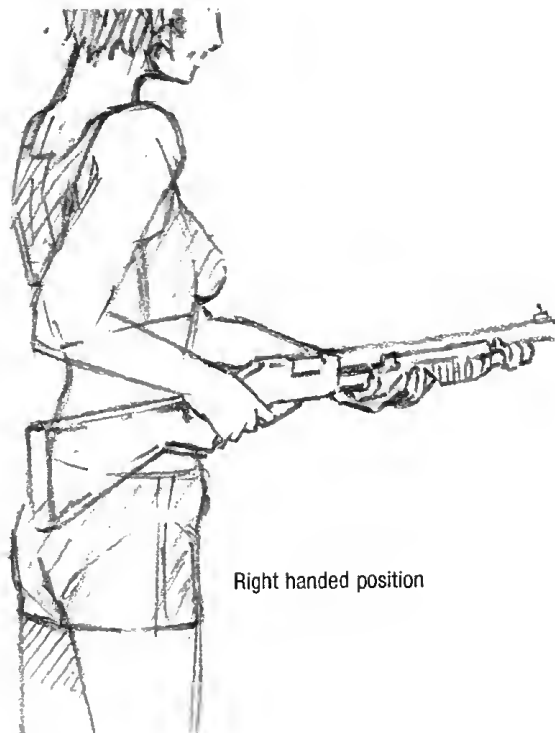
US M1897 Trench Gun



# Readying to Fire a Shotgun



Positions where the hands support the gun

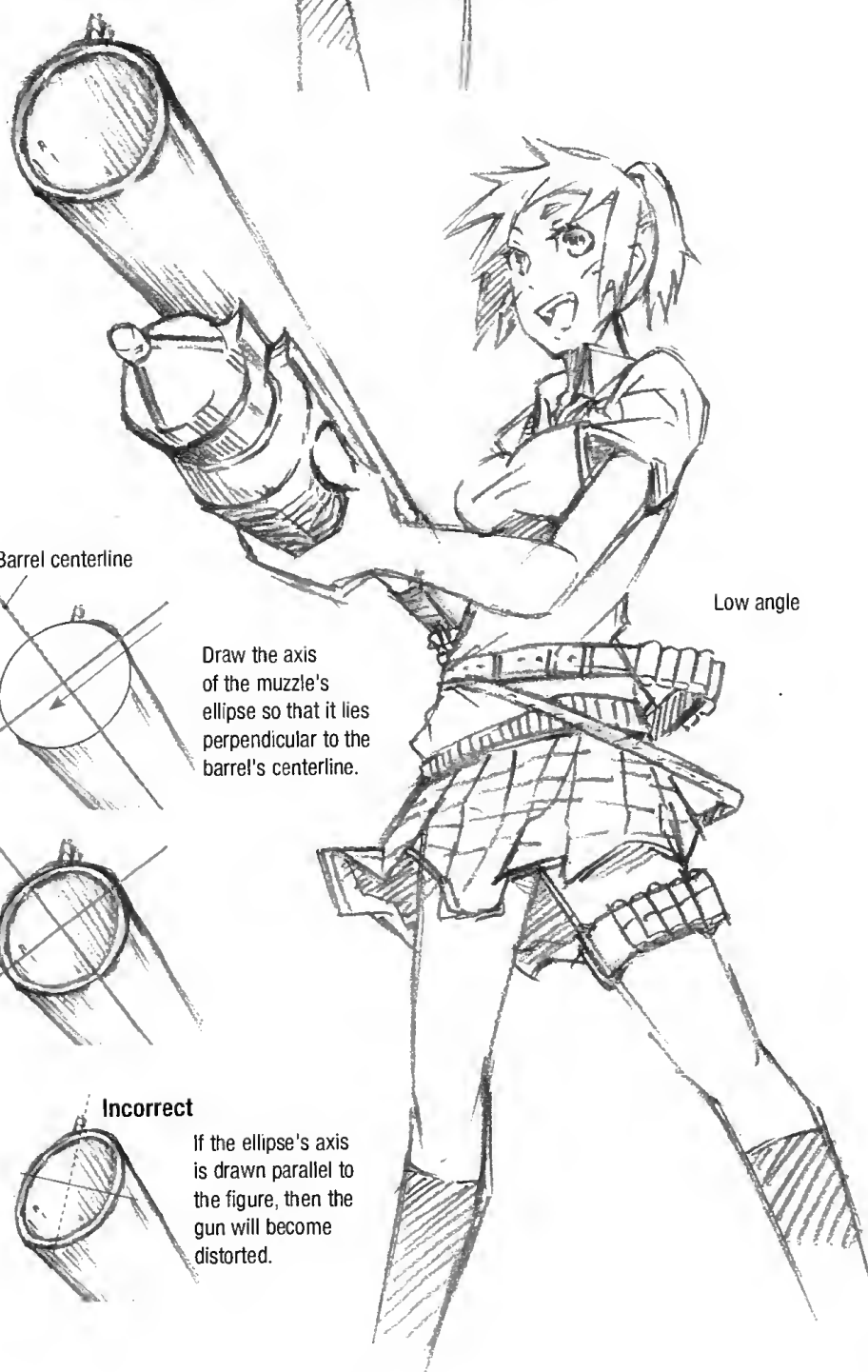


Right handed position

Front view



Use blocks to capture the shotgun's form.



Barrel centerline

Draw the axis of the muzzle's ellipse so that it lies perpendicular to the barrel's centerline.

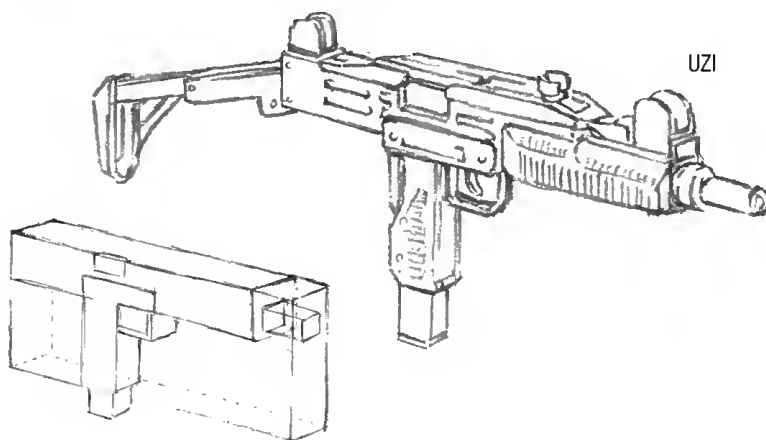
Low angle

Incorrect

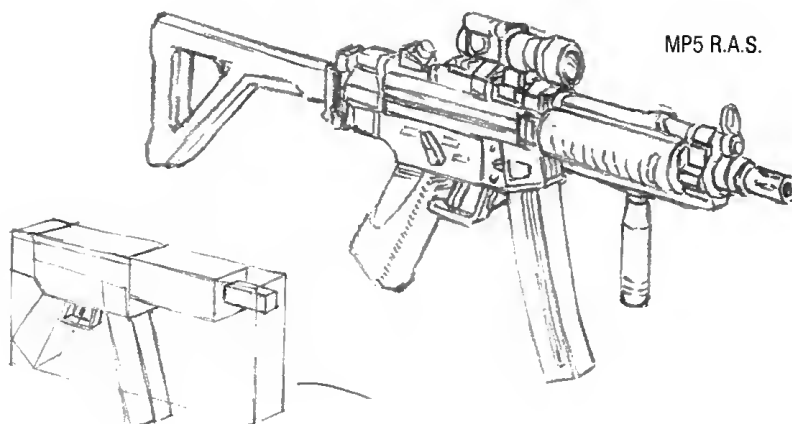
If the ellipse's axis is drawn parallel to the figure, then the gun will become distorted.

## Fully Automatic Rifles ("Machine Guns")

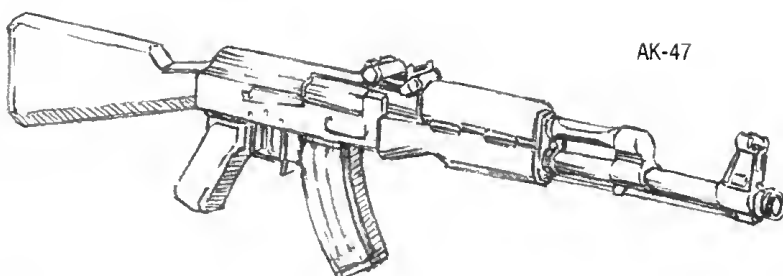
Combine simple blocks to capture the general form.



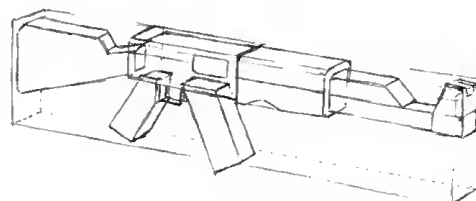
UZI



MP5 R.A.S.



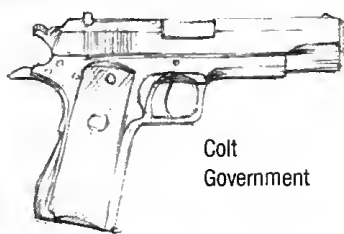
AK-47



\*The AK-47 is categorized as a military assault rifle, but in this book, we will treat it as a machine gun, owing to its speed of fire.

This shows the character being thrown off balance by the recoil.

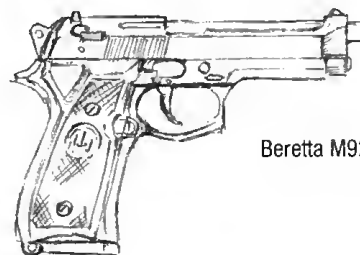
## Firearms Often Seen in *Manga* and the Cinema



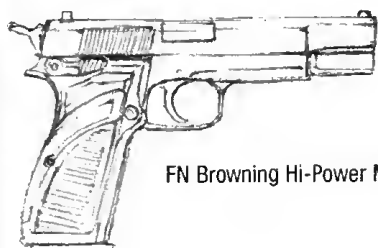
Colt  
Government



Beretta M1915



Beretta M92F



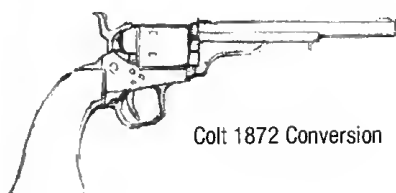
FN Browning Hi-Power MkIII



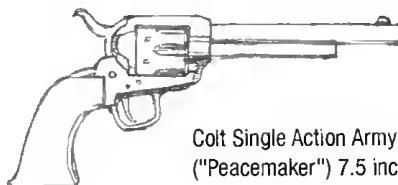
Desert Eagle



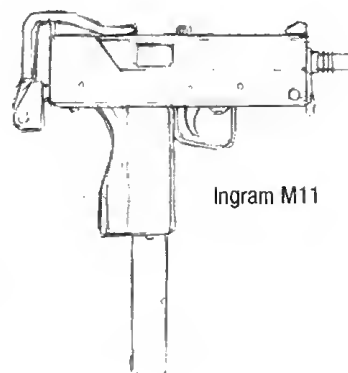
Heckler & Koch USP



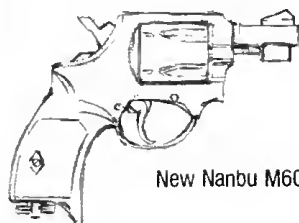
Colt 1872 Conversion



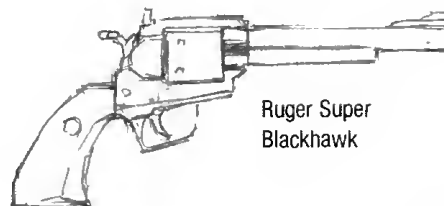
Colt Single Action Army  
("Peacemaker") 7.5 inch



Ingram M11



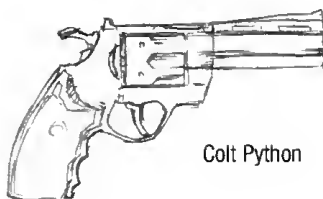
New Nanbu M60



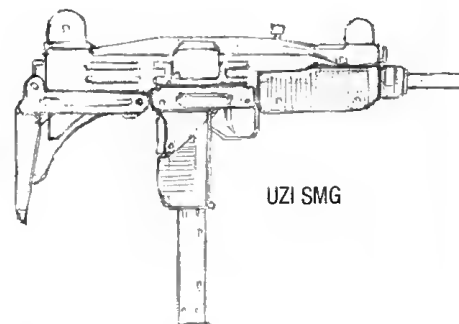
Ruger Super  
Blackhawk



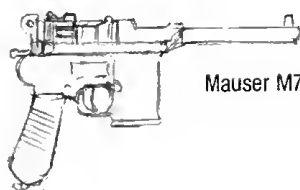
Smith & Wesson M28  
"Highway Patrolman"



Colt Python



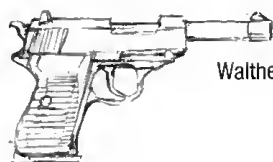
UZI SMG



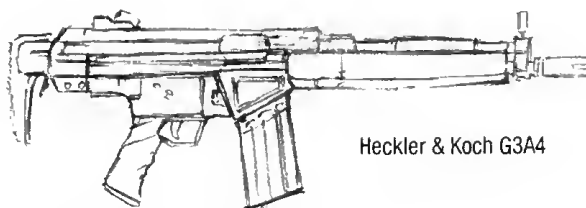
Mauser M712



AK-47  
Kalashnikov's



Walther P38



Heckler & Koch G3A4

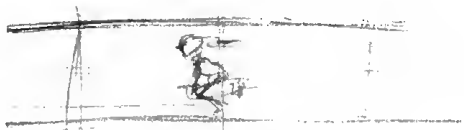
# Echoing Ellipses

## Using Ellipses to Portray Tunnels as Three-Dimensional Spaces

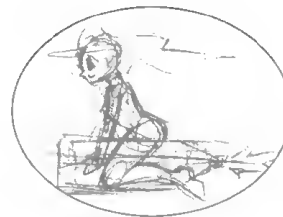
Using a sequence of ellipses that start as very oblong but gradually become smaller and more circular creates the illusion of depth as well as a wide-angle lens effect.



Rough sketch



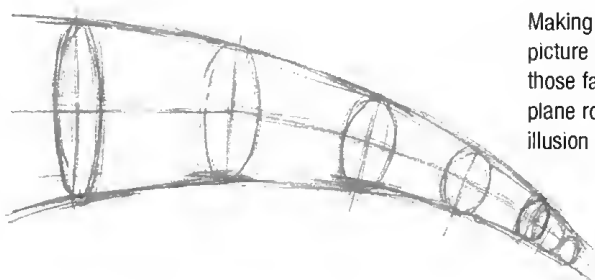
Picture a character traveling through a pipe.



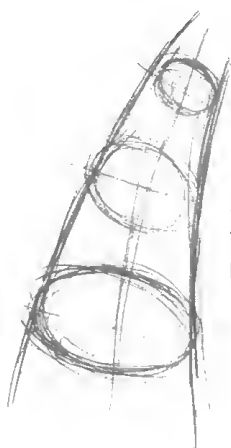
Profile view



When the tunnel is made straight, repeating the same ellipse, but making them progressively smaller produces the illusion of depth.



Making ellipses close to the picture plane narrower and those far from the picture plane rounder heightens the illusion of depth.



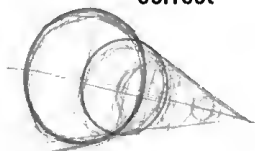
Study sketch: This shows a tunnel or tunnel-like space approaching the picture plane and depicted from a high angle.

### Incorrect

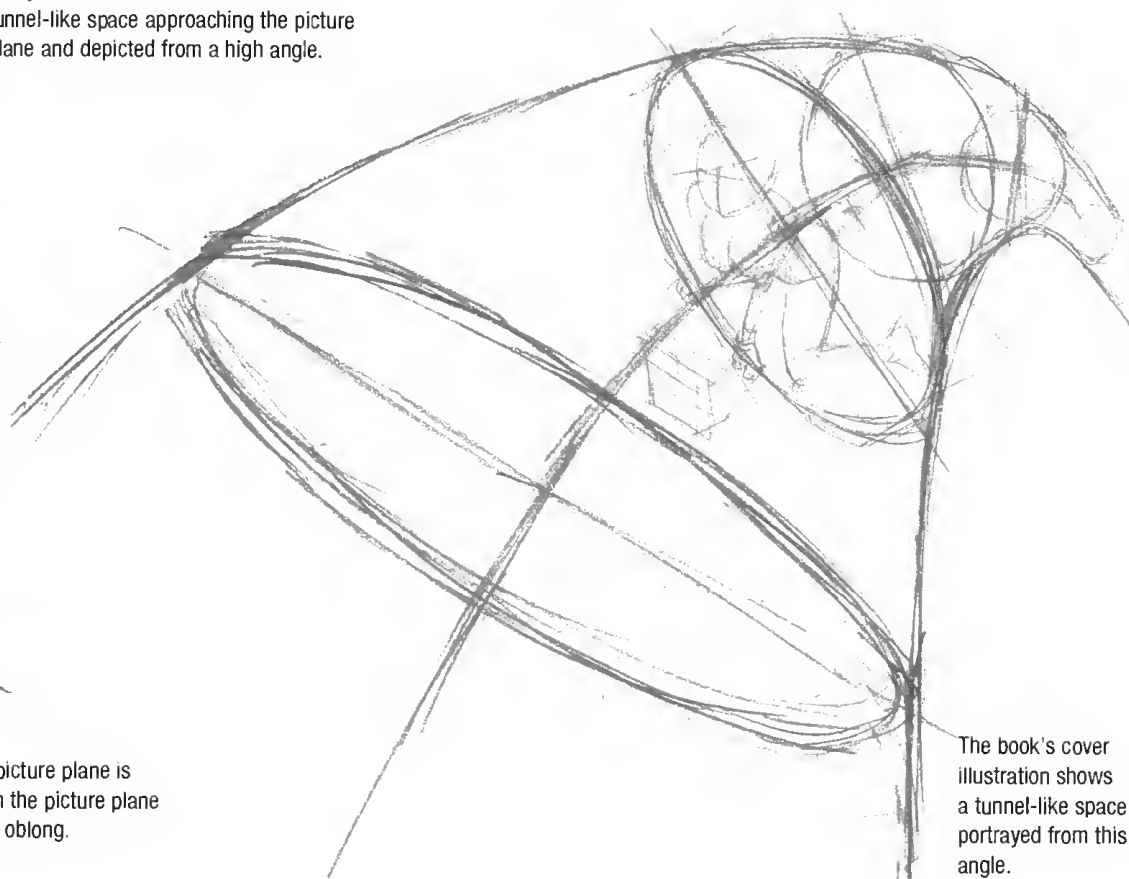


In the above, the ellipses close to the picture plane are rounder and those far are narrower.

### Correct



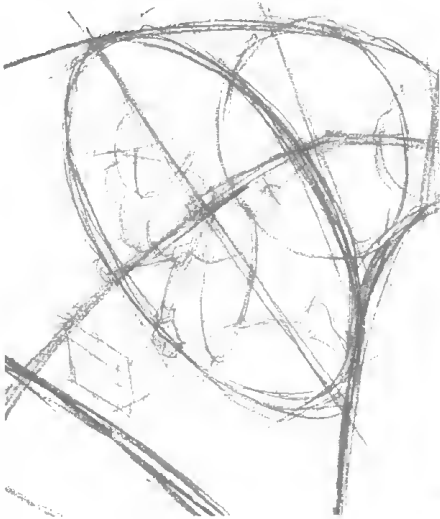
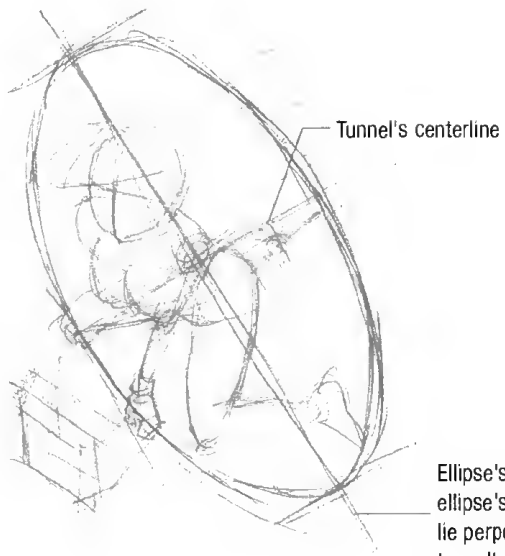
If the ellipse close to the picture plane is round, then those far from the picture plane should not be made more oblong.



The book's cover illustration shows a tunnel-like space portrayed from this angle.



Under drawing



Final image

Members of the *Manga* and Animation Department of Nihon Kogakuin College contributed to the production of this book. I look forward to these young artists leading and paving the way in Japan and abroad for a new era of *manga*.

Shichimi



Sakura Mugen



Marco



Hajime Tsuzuki





Rika Hoshino



Arue Niina



Yuzuri Azusa



Hirosuke Terama





Wataru Hisatomi



Kirakira Shiro



Yuki Namiki





Shirokuro Yuki



Itsuki Murakumo



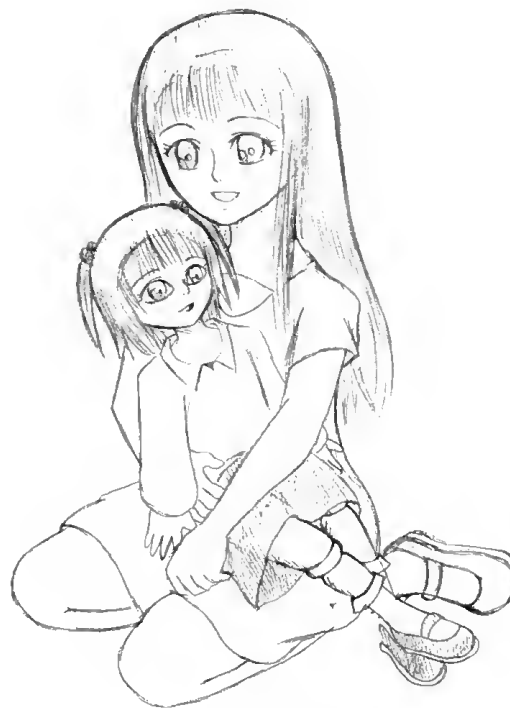
Takuya Shinjo



0219 (Zeroni Juku)



Gaku



Minami Oyaizu



Siny

## Afterword

*Manga* originated with artists attempting to draw things familiar to them. The *Choju-giga* or "Scrolls of Frolicking Animals," considered the world's first *manga*, shows frogs and rabbits holding objects such as ladles, bows, and arrows, and wearing garments, such as hats.

Some argue that *manga* is pure fiction and does not resemble real life. And, certainly, this position has a point.

Perhaps you have thought to yourself, "It would be so nice if I could make my composition just a little more convincing," or "I wish I could design cool characters."

If you can draw successfully personal affects and items, in other words, "props," then even an object that is difficult to draw, albeit commonplace, you will become able to produce appealing compositions that exceed the viewer's imagination.

Conversely, a single slipshod "prop" could ruin a well-designed character or scene. One aspect of props is that they have the power to make or break a composition.

"I want to add props, but my artwork never comes out right." "I feel like I have to add props, but I'm not sure what to do."

I wrote this book to teach a few key techniques to those of you who have felt this way. Applying a little of your knowledge of perspective or going all out to distort objects' forms when creating a composition that includes props for characters imbues that composition with an authenticity unique to *manga* and unlike what we see in drafted drawings.

You will be astonished at how much a single glass held by a character can appeal to your readers. An ordinary, inanimate "prop" is able to breathe life into a composition. Like the background or the character, the "prop" becomes an "actor" in its own right and with a heart of its very own.

A composition teeming with life speaks to the reader. What gives birth to "props" imbued with a heart and life is your artistic ability.

It is my hope that this book helps you achieve this.

Hikaru Hayashi  
Go office